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## Design of Anion– $\pi$ Interactions and Hydrogen Bonds to Recognition of the Chloride, Bromide and Nitrate Anions

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### Supplementary Material

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**Table S1.** Optimized Cartesian coordinates for the compounds investigated in this study using the B97D3/6-31+G(d) + PCM(DMSO) computational model.

Compound	$1^{\cdots}\text{Cl}^-$		
Atom	X	Y	Z
C	-3.905271	-2.732627	-4.263589
C	-4.605072	-1.660825	-3.751756
C	-3.923185	-0.534436	-3.184528
C	-2.467833	-0.512987	-3.160203
C	-1.785953	-1.658839	-3.695796
C	-2.478399	-2.728444	-4.228001
C	-4.640277	0.544018	-2.643169
C	-3.988631	1.647274	-2.067968
C	-2.535546	1.686675	-2.043214
C	-1.795533	0.610131	-2.605393
C	-4.734763	2.732338	-1.501934
C	-4.096024	3.810217	-0.925633
C	-2.669987	3.853918	-0.893400
C	-1.916212	2.830244	-1.434461
C	-0.279260	0.638535	-2.555311
N	0.208736	0.115697	-1.264184
C	0.982064	0.803384	-0.430497
C	1.496128	0.530307	0.881110
C	2.211792	1.840014	0.917791
C	1.661154	2.122020	-0.470904
N	1.292524	-0.558526	1.648501
O	2.939184	2.461235	1.705181
O	1.735928	3.055844	-1.282910
C	1.784315	-0.866406	2.934083
C	1.380882	-2.097696	3.495592
C	1.832118	-2.468532	4.767411
C	2.687352	-1.623854	5.494327
C	3.084379	-0.401001	4.928976
C	2.642115	-0.013926	3.656469
H	-4.434459	-3.585915	-4.689832
H	-5.696701	-1.651517	-3.763261
H	-0.699156	-1.705758	-3.674138
H	-1.927974	-3.584441	-4.621072
H	-5.732174	0.520540	-2.662023
H	-5.824904	2.683218	-1.534850
H	-4.673737	4.628960	-0.494566
H	-2.168054	4.707776	-0.435675
H	-0.832671	2.905575	-1.390696
H	0.157418	0.042470	-3.364610
H	0.112399	1.652066	-2.672833
H	-0.153311	-0.801660	-0.954416
H	0.675119	-1.282461	1.235378
H	0.716615	-2.752895	2.930421
H	1.512439	-3.422510	5.189680
H	3.748445	0.265537	5.482143
H	2.954965	0.937414	3.228571
H	3.038345	-1.914141	6.485306
Cl	-0.664359	-2.672721	0.170622
Compound	$1^{\cdots}\text{Br}^-$		
Atom	X	Y	Z
C	-3.708586	-2.860744	-4.020856
C	-4.425905	-1.842498	-3.429877
C	-3.774382	-0.653347	-2.964781
C	-2.337203	-0.508772	-3.133031
C	-1.635156	-1.599687	-3.749122
C	-2.295545	-2.734194	-4.176199
C	-4.504655	0.370393	-2.341036
C	-3.877410	1.524714	-1.843710

C	-2.441125	1.683450	-2.003843
C	-1.695993	0.670077	-2.665912
C	-4.630783	2.547572	-1.180185
C	-4.012141	3.670487	-0.671731
C	-2.600080	3.824671	-0.808761
C	-1.841589	2.866443	-1.453233
C	-0.185481	0.776067	-2.737611
N	0.380099	0.195721	-1.500997
C	1.103083	0.880805	-0.618609
C	1.509221	0.598691	0.726337
C	2.285472	1.871795	0.803901
C	1.834666	2.170342	-0.621729
N	1.166955	-0.454567	1.493952
O	2.987045	2.460762	1.636655
O	1.985076	3.101139	-1.425400
C	1.586328	-0.806113	2.792872
C	0.967724	-1.930837	3.381160
C	1.344157	-2.342691	4.664291
C	2.334817	-1.645107	5.375439
C	2.944409	-0.526620	4.783708
C	2.580835	-0.101631	3.498434
H	-4.213070	-3.764368	-4.365801
H	-5.506510	-1.925387	-3.298113
H	-0.555132	-1.553669	-3.872295
H	-1.728820	-3.548696	-4.629842
H	-5.583825	0.255388	-2.217141
H	-5.709557	2.412744	-1.079937
H	-4.594889	4.439957	-0.163564
H	-2.113191	4.710934	-0.398985
H	-0.768491	3.023667	-1.534994
H	0.218235	0.238936	-3.602829
H	0.161810	1.808254	-2.821857
H	-0.089401	-0.661297	-1.163576
H	0.461119	-1.092551	1.082808
H	0.197709	-2.469682	2.827189
H	0.859488	-3.213344	5.108913
H	3.715241	0.025164	5.324479
H	3.052557	0.772181	3.051793
H	2.626992	-1.968247	6.375296
Br	-1.249152	-2.303017	0.059071
Compound		$1^{-}\text{NO}_3^{-}$	
Atom	X	Y	Z
C	-3.784067	-2.873554	-3.860130
C	-4.494744	-1.804094	-3.358100
C	-3.829180	-0.608890	-2.930700
C	-2.381992	-0.514056	-3.043051
C	-1.686763	-1.658106	-3.564075
C	-2.362626	-2.796165	-3.957975
C	-4.552240	0.468523	-2.395107
C	-3.912049	1.636518	-1.949907
C	-2.465616	1.746784	-2.056540
C	-1.723824	0.673631	-2.621242
C	-4.663279	2.717878	-1.383510
C	-4.035308	3.856351	-0.924037
C	-2.615413	3.966919	-1.014272
C	-1.857442	2.950374	-1.562780
C	-0.209676	0.747463	-2.685068
N	0.370415	0.182580	-1.450249
C	1.035211	0.894935	-0.544046
C	1.468149	0.588766	0.786172
C	2.118993	1.924779	0.927816
C	1.651191	2.242406	-0.488047

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N	1.241654	-0.540861	1.484708	
O	2.759936	2.539162	1.790470	
O	1.733978	3.212348	-1.254395	
C	1.652972	-0.901052	2.783182	
C	1.184963	-2.133861	3.287470	
C	1.563859	-2.556291	4.566723	
C	2.407190	-1.759733	5.358801	
C	2.867211	-0.533616	4.851087	
C	2.500144	-0.097246	3.570888	
H	-4.300537	-3.780500	-4.177194	
H	-5.581838	-1.850250	-3.268867	
H	-0.601444	-1.647246	-3.643596	
H	-1.802362	-3.649239	-4.343384	
H	-5.638554	0.391384	-2.310904	
H	-5.748251	2.615333	-1.318776	
H	-4.616540	4.671232	-0.490383	
H	-2.121157	4.866524	-0.644205	
H	-0.778526	3.077305	-1.608463	
H	0.181217	0.191326	-3.544723	
H	0.153290	1.772268	-2.786757	
H	0.024663	-0.740643	-1.152342	
H	0.642352	-1.232075	1.001258	
H	0.529839	-2.754809	2.674659	
H	1.195579	-3.511484	4.944029	
H	3.522724	0.095684	5.455555	
H	2.857588	0.857936	3.189001	
H	2.701087	-2.089692	6.355855	
N	-1.616550	-2.250713	0.197360	
O	-2.047116	-1.185998	0.712123	
O	-2.359813	-3.244057	0.007651	
O	-0.368934	-2.323416	-0.146489	
Compound		2-Cl <sup>-</sup>		
Atom	X	Y	Z	
C	-3.659884	-2.733283	-4.357258	
C	-4.455875	-1.656335	-4.045509	
C	-3.926192	-0.508154	-3.372597	
C	-2.505613	-0.455922	-3.032634	
C	-1.743250	-1.631854	-3.352230	
C	-2.291575	-2.721167	-3.992703	
C	-4.722292	0.595534	-3.028768	
C	-4.246665	1.707490	-2.314960	
C	-2.824297	1.746393	-1.981519	
C	-1.958366	0.704131	-2.416839	
C	-5.099937	2.789335	-1.924127	
C	-4.615305	3.861425	-1.211984	
C	-3.249162	3.895575	-0.842566	
C	-2.394849	2.877713	-1.207644	
C	-0.449300	0.851868	-2.284806	
N	0.025389	0.326072	-0.996231	
C	1.100202	0.785632	-0.365081	
C	1.723404	0.429901	0.874692	
C	2.782524	1.465687	0.686548	
C	2.110006	1.839285	-0.628732	
N	1.342948	-0.517180	1.755966	
O	3.778756	1.873100	1.298982	
O	2.317262	2.665162	-1.527714	
C	1.928283	-0.904423	2.979113	
C	1.281762	-1.930246	3.702686	
C	1.809366	-2.364965	4.923886	
C	2.981832	-1.787945	5.439373	
C	3.619104	-0.768252	4.713645	
C	3.104683	-0.320918	3.488944	

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H	-0.157819	1.899354	-2.361049	
H	-0.496566	-0.459788	-0.572614	
H	0.486086	-1.040478	1.499852	
H	0.371169	-2.377860	3.301955	
H	1.299740	-3.158369	5.472842	
H	4.530863	-0.310638	5.101639	
H	3.606323	0.471617	2.935561	
H	3.391860	-2.127790	6.391137	
Cl	-1.372722	-2.010850	0.732644	
F	-1.126782	2.987471	-0.745711	
F	-2.806349	4.927443	-0.099902	
F	-5.420996	4.873112	-0.839105	
F	-6.416789	2.792037	-2.226879	
F	-6.022639	0.583923	-3.398017	
F	-5.760903	-1.731480	-4.387582	
F	-4.161710	-3.813686	-4.983795	
F	-1.544612	-3.810581	-4.252467	
F	-0.444603	-1.762797	-2.987919	
H	0.047902	0.332943	-3.109548	
Compound		$2^{-}\text{Br}^{-}$		
Atom	X	Y	Z	
C	-3.458371	-2.915168	-3.890671	
C	-4.291761	-1.904586	-3.474616	
C	-3.771591	-0.651597	-3.015947	
C	-2.328856	-0.421678	-2.994173	
C	-1.519407	-1.527366	-3.431097	
C	-2.057648	-2.719993	-3.860136	
C	-4.607338	0.382092	-2.566743	
C	-4.136432	1.589657	-2.028694	
C	-2.690018	1.793646	-1.975457	
C	-1.812323	0.821966	-2.531983	
C	-5.021042	2.608354	-1.547147	
C	-4.539736	3.762163	-0.975422	
C	-3.142151	3.947474	-0.851138	
C	-2.259329	2.998021	-1.317986	
C	-0.308215	1.058803	-2.535333	
N	0.229373	0.480194	-1.294295	
C	1.245574	0.940634	-0.575549	
C	1.738380	0.537745	0.705836	
C	2.836004	1.546265	0.649269	
C	2.296494	1.976917	-0.714279	
N	1.227196	-0.407795	1.521382	
O	3.779263	1.905945	1.365676	
O	2.598369	2.826967	-1.561253	
C	1.687005	-0.879798	2.767295	
C	0.897804	-1.856080	3.413279	
C	1.303560	-2.374502	4.648074	
C	2.487169	-1.924408	5.256591	
C	3.262811	-0.948295	4.609830	
C	2.873994	-0.421805	3.370426	
H	-0.064856	2.118128	-2.580023	
H	-0.342557	-0.273869	-0.877255	
H	0.358597	-0.860201	1.189021	
H	-0.021312	-2.203318	2.938700	
H	0.688438	-3.131587	5.136955	
H	4.184114	-0.588727	5.071316	
H	3.479412	0.338153	2.878137	
H	2.800389	-2.329037	6.219729	
Br	-1.678783	-1.738606	0.260288	
F	-0.951112	3.267329	-1.085349	
F	-2.690531	5.057620	-0.236917	
F	-5.372247	4.715532	-0.516860	

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F	-6.363277	2.468639	-1.620728	
F	-5.944943	0.198027	-2.641159	
F	-5.621041	-2.148388	-3.504017	
F	-3.947849	-4.096245	-4.312815	
F	-1.256537	-3.738334	-4.228629	
F	-0.164398	-1.493492	-3.397183	
H	0.154127	0.591850	-3.407974	
Compound	<b>2<sup>-</sup>-NO<sub>3</sub><sup>-</sup></b>			
Atom	X	Y	Z	
C	-3.559552	-2.872526	-4.312074	
C	-4.368908	-1.834778	-3.913822	
C	-3.829204	-0.669866	-3.278756	
C	-2.386888	-0.555966	-3.071912	
C	-1.608088	-1.694340	-3.476069	
C	-2.165205	-2.801859	-4.076311	
C	-4.638134	0.390842	-2.843156	
C	-4.148574	1.511967	-2.153651	
C	-2.704683	1.612525	-1.952317	
C	-1.836737	0.621100	-2.490693	
C	-5.011147	2.542614	-1.659000	
C	-4.513053	3.620980	-0.966001	
C	-3.121814	3.712579	-0.722419	
C	-2.258980	2.746169	-1.192089	
C	-0.326187	0.823306	-2.474779	
N	0.244927	0.263010	-1.242041	
C	1.230555	0.803043	-0.532575	
C	1.762146	0.460102	0.749890	
C	2.780320	1.548622	0.666167	
C	2.196106	1.915120	-0.697332	
N	1.330419	-0.508968	1.582403	
O	3.700816	1.989892	1.365750	
O	2.424038	2.773397	-1.559031	
C	1.816443	-0.897778	2.846360	
C	1.090862	-1.892669	3.536787	
C	1.525548	-2.331325	4.792656	
C	2.681137	-1.786211	5.376376	
C	3.396630	-0.795446	4.684103	
C	2.976997	-0.347239	3.424265	
H	0.123685	0.349428	-3.351826	
H	-0.074260	1.881898	-2.529511	
H	-0.235211	-0.548660	-0.830642	
H	0.484336	-1.009627	1.261944	
H	0.192004	-2.316431	3.086195	
H	0.956009	-3.101055	5.315626	
H	4.295922	-0.362741	5.125823	
H	3.534845	0.426402	2.898619	
N	-2.105887	-1.296240	0.688356	
O	-2.096818	-0.205282	1.315387	
O	-3.174520	-1.890025	0.403945	
O	-0.977941	-1.818339	0.317662	
H	3.018372	-2.128423	6.355402	
F	-0.960406	2.908729	-0.845096	
F	-2.659636	4.747682	0.003501	
F	-5.326662	4.584057	-0.494939	
F	-6.349001	2.487862	-1.839721	
F	-5.965317	0.323718	-3.089608	
F	-5.695681	-1.965871	-4.132178	
F	-4.070028	-3.969436	-4.901621	
F	-1.398396	-3.854642	-4.416357	
F	-0.276866	-1.773337	-3.230221	
Compound	<b>3<sup>-</sup>-Cl<sup>-</sup></b>			
Atom	X	Y	Z	

C	-3.688642	-2.692810	-4.522299
C	-4.457566	-1.682819	-3.984344
C	-3.851647	-0.554348	-3.340457
C	-2.401115	-0.463589	-3.265618
C	-1.645271	-1.546341	-3.831936
C	-2.265686	-2.621034	-4.437913
C	-4.638070	0.460050	-2.772027
C	-4.060478	1.561981	-2.120368
C	-2.612432	1.669530	-2.042516
C	-1.803098	0.660736	-2.633606
C	-4.877586	2.579043	-1.526686
C	-4.312413	3.653971	-0.873310
C	-2.892149	3.762996	-0.786937
C	-2.071172	2.806867	-1.353030
C	-0.291957	0.751761	-2.531440
N	0.182250	0.130775	-1.278956
C	0.856904	0.779933	-0.335764
C	1.298066	0.421994	0.971993
C	1.898150	1.752596	1.212561
C	1.456827	2.142409	-0.199555
N	1.135903	-0.706309	1.693854
O	2.473695	2.310279	2.154871
O	1.523659	3.147733	-0.914693
C	1.741968	-0.929071	2.942210
C	0.967729	-1.325847	4.048157
C	1.544342	-1.582226	5.295089
C	2.925186	-1.428451	5.465267
C	3.719386	-1.038310	4.380531
C	3.131650	-0.810637	3.133079
H	0.057055	1.787051	-2.542022
H	-0.161011	-0.816755	-1.054062
H	0.510423	-1.445410	1.304979
F	-0.370761	-1.447190	3.911190
F	0.775119	-1.951745	6.340026
F	5.054132	-0.915922	4.536634
F	3.929680	-0.504135	2.089043
F	3.488939	-1.662808	6.666564
Cl	-0.697699	-2.716110	0.082774
H	-0.994833	2.930649	-1.264325
H	-2.448327	4.613392	-0.267063
H	-4.943787	4.420360	-0.421826
H	-5.962255	2.479625	-1.600832
H	-5.726385	0.385673	-2.829575
H	-5.547309	-1.726088	-4.033174
H	-4.160447	-3.548678	-5.006691
H	-1.660666	-3.428438	-4.852832
H	-0.558584	-1.540011	-3.776672
H	0.194692	0.252917	-3.377316
Compound		$3^{\text{---}}\text{Br}^-$	
Atom	X	Y	Z
C	-3.568029	-2.783202	-4.304634
C	-4.304893	-1.877738	-3.571389
C	-3.695695	-0.702621	-3.021421
C	-2.281787	-0.450757	-3.251083
C	-1.558007	-1.426570	-4.016877
C	-2.177334	-2.551060	-4.524807
C	-4.447337	0.209781	-2.264719
C	-3.862988	1.354761	-1.698809
C	-2.449098	1.617750	-1.913858
C	-1.681557	0.713181	-2.697789
C	-4.638726	2.265329	-0.909332
C	-4.062085	3.378377	-0.334290

ARTICLE				Journal Name
C	-2.672221	3.635906	-0.528925	
C	-1.894261	2.787651	-1.293213	
C	-0.179796	0.898603	-2.805395	
N	0.447315	0.218039	-1.649856	
C	1.045014	0.862515	-0.648465	
C	1.356584	0.491197	0.690926	
C	2.006106	1.789921	0.977252	
C	1.672400	2.204277	-0.461403	
N	1.054830	-0.613957	1.401961	
O	2.546441	2.313842	1.957920	
O	1.808370	3.214979	-1.157775	
C	1.487872	-0.839002	2.719666	
C	0.557383	-1.072307	3.748274	
C	0.964193	-1.306021	5.064703	
C	2.328708	-1.313287	5.377712	
C	3.275544	-1.082423	4.372593	
C	2.852494	-0.871653	3.057441	
H	0.121452	1.948248	-2.789365	
H	0.048961	-0.707719	-1.420817	
H	0.393994	-1.300262	0.978454	
F	-0.763661	-1.037007	3.469204	
F	0.051005	-1.513365	6.035690	
F	4.590752	-1.103797	4.671848	
F	3.783902	-0.703044	2.095388	
F	2.729470	-1.537010	6.644500	
Br	-0.916244	-2.582700	-0.336837	
H	-0.840733	3.025410	-1.418152	
H	-2.217970	4.515295	-0.069822	
H	-4.661233	4.061833	0.268870	
H	-5.700259	2.052540	-0.768380	
H	-5.508363	0.013926	-2.094379	
H	-5.369078	-2.041218	-3.390795	
H	-4.040080	-3.677014	-4.714835	
H	-1.594637	-3.275041	-5.096319	
H	-0.492790	-1.298756	-4.197336	
H	0.220482	0.471408	-3.730349	
Compound		$3^{-}\text{NO}_3^{-}$		
Atom	X	Y	Z	
C	-3.585921	-2.854670	-4.112712	
C	-4.356481	-1.827077	-3.611347	
C	-3.753983	-0.628300	-3.107655	
C	-2.307143	-0.485207	-3.138520	
C	-1.548113	-1.586476	-3.662669	
C	-2.164669	-2.729276	-4.132975	
C	-4.538799	0.406315	-2.574523	
C	-3.961233	1.576341	-2.055459	
C	-2.515367	1.734384	-2.079321	
C	-1.710982	0.704860	-2.638848	
C	-4.776112	2.612817	-1.493141	
C	-4.210658	3.752258	-0.960749	
C	-2.792267	3.909063	-0.969564	
C	-1.973724	2.936855	-1.511154	
C	-0.198687	0.820949	-2.617848	
N	0.336935	0.188124	-1.395339	
C	0.918607	0.855178	-0.402158	
C	1.288267	0.475964	0.918912	
C	1.841401	1.813240	1.228026	
C	1.471906	2.228224	-0.202052	
N	1.095622	-0.682714	1.586045	
O	2.348031	2.360690	2.213216	
O	1.553274	3.252015	-0.887035	
C	1.645040	-0.966988	2.845596	



Journal Name			ARTICLE	
C	0.837579	-1.480327	3.877834	
C	1.361024	-1.794137	5.134817	
C	2.720600	-1.583958	5.392963	
C	3.548158	-1.082202	4.381681	
C	3.015800	-0.798162	3.121071	
H	-4.055128	-3.764708	-4.488800	
H	-5.444629	-1.910356	-3.581881	
H	-0.461010	-1.538165	-3.686604	
H	-1.557417	-3.548858	-4.519863	
H	-5.624923	0.292990	-2.551278	
H	-5.859096	2.474963	-1.490728	
H	-4.840143	4.532579	-0.530925	
H	-2.347689	4.808842	-0.541470	
H	-0.898517	3.097549	-1.492018	
H	0.250743	0.333143	-3.490476	
H	0.140871	1.858396	-2.632491	
H	-0.005751	-0.754642	-1.167537	
H	0.452093	-1.369199	1.145506	
N	-1.789399	-2.190113	0.123133	
O	-2.227620	-1.120787	0.617855	
O	-2.547543	-3.144807	-0.174663	
O	-0.514524	-2.310325	-0.090598	
F	3.853012	-0.389999	2.144021	
F	-0.482783	-1.662942	3.656698	
F	0.558123	-2.273946	6.106877	
F	3.232180	-1.871743	6.606058	
F	4.865201	-0.908274	4.617607	
Compound		4-Cl <sup>-</sup>		
Atom	X	Y	Z	
C	-4.558477	3.559533	-0.216684	
C	-5.052855	2.322230	-0.556808	
C	-4.336088	1.121781	-0.245187	
C	-3.068125	1.200170	0.477126	
C	-2.591169	2.525744	0.760698	
C	-3.305963	3.657859	0.437035	
C	-4.811328	-0.151595	-0.595736	
C	-4.102120	-1.340364	-0.358024	
C	-2.837081	-1.246542	0.367571	
C	-2.380256	0.011964	0.850256	
C	-4.583399	-2.619158	-0.786981	
C	-3.865928	-3.769088	-0.553247	
C	-2.617884	-3.692200	0.110378	
C	-2.124878	-2.480720	0.544580	
C	-1.211735	0.087210	1.823771	
N	0.070322	0.228036	1.118774	
C	1.217091	-0.278756	1.556916	
C	2.539366	-0.280651	1.028935	
C	3.064504	-1.088962	2.151359	
C	1.651931	-1.072124	2.746350	
N	3.043940	0.231095	-0.114248	
O	4.156654	-1.583199	2.454879	
O	1.097100	-1.528698	3.749716	
C	4.412691	0.240535	-0.431408	
C	4.857771	-0.247919	-1.673829	
C	6.208551	-0.226024	-2.031316	
C	7.155772	0.277245	-1.131905	
C	6.739785	0.772525	0.109557	
C	5.382263	0.768648	0.442038	
F	3.961712	-0.768271	-2.541128	
F	6.606582	-0.710244	-3.225908	
F	7.648515	1.283906	0.965962	
F	5.002729	1.318415	1.614509	

ARTICLE				Journal Name
F	8.461865	0.292689	-1.463190	
F	-0.894315	-2.519165	1.107834	
F	-1.906080	-4.821877	0.281214	
F	-4.317335	-4.968547	-0.964343	
F	-5.753173	-2.744207	-1.451535	
F	-6.015586	-0.238206	-1.203385	
F	-6.235174	2.285980	-1.209655	
F	-5.231325	4.686020	-0.516372	
F	-2.809910	4.880801	0.701934	
F	-1.371720	2.741067	1.311974	
H	-1.170325	-0.809557	2.442207	
H	-1.356503	0.928073	2.508979	
H	0.082615	0.741283	0.222428	
H	2.372669	0.634747	-0.801056	
Cl	0.660353	1.494908	-1.803816	
Compound		$4-\text{Br}^-$		
Atom	X	Y	Z	
C	-4.994943	3.499123	0.376916	
C	-5.219946	2.315252	-0.284309	
C	-4.320294	1.207638	-0.154876	
C	-3.188945	1.293737	0.766590	
C	-2.966279	2.587743	1.354906	
C	-3.842555	3.637401	1.189334	
C	-4.467581	0.026704	-0.896508	
C	-3.585844	-1.063354	-0.810801	
C	-2.535416	-1.013096	0.202304	
C	-2.379804	0.150732	1.008818	
C	-3.686586	-2.193121	-1.683591	
C	-2.818646	-3.254529	-1.580543	
C	-1.818796	-3.242149	-0.581152	
C	-1.692339	-2.173671	0.278805	
C	-1.297220	0.189805	2.075327	
N	-0.006038	0.455986	1.408218	
C	1.182974	0.128589	1.910881	
C	2.452143	-0.058879	1.298377	
C	3.108668	-0.376273	2.587955	
C	1.738391	-0.179209	3.259861	
N	2.815810	-0.043193	-0.002771	
O	4.244823	-0.697012	2.949949	
O	1.277719	-0.276292	4.399702	
C	4.138840	-0.184025	-0.451122	
C	4.474501	-1.163418	-1.403920	
C	5.783972	-1.316849	-1.867292	
C	6.794898	-0.478512	-1.382386	
C	6.486909	0.506986	-0.437059	
C	5.169067	0.660327	0.001706	
F	3.517909	-2.002912	-1.857490	
F	6.081012	-2.276382	-2.767638	
F	7.456124	1.328600	0.015998	
F	4.886428	1.657601	0.866454	
F	8.060482	-0.621566	-1.822362	
F	-0.678724	-2.277445	1.171808	
F	-0.974581	-4.288362	-0.499040	
F	-2.899046	-4.307731	-2.415701	
F	-4.623607	-2.251478	-2.656212	
F	-5.507280	-0.060429	-1.756661	
F	-6.314145	2.243450	-1.074325	
F	-5.837387	4.541706	0.250597	
F	-3.595331	4.832656	1.758993	
F	-1.855402	2.866972	2.080597	
H	-1.252038	-0.766056	2.602503	
H	-1.502081	0.953011	2.825175	

H		-0.055583	0.520394	0.378098
H		2.057651	-0.039767	-0.714855
Br		0.074165	0.107687	-1.908039
Compound			4 <sup>-</sup> -NO <sub>3</sub> <sup>-</sup>	
Atom	X		Y	Z
C		-3.406444	-2.786850	-4.712644
C		-4.246110	-1.781692	-4.293723
C		-3.758557	-0.674398	-3.526900
C		-2.334308	-0.577221	-3.216469
C		-1.527207	-1.689095	-3.637603
C		-2.034727	-2.744392	-4.362586
C		-4.600838	0.343098	-3.053716
C		-4.161305	1.406605	-2.248390
C		-2.729467	1.509531	-1.974153
C		-1.825357	0.559863	-2.528439
C		-5.062890	2.379822	-1.709367
C		-4.613104	3.412071	-0.919798
C		-3.233101	3.514067	-0.623643
C		-2.334195	2.600208	-1.129017
C		-0.319023	0.769754	-2.429221
N		0.206822	0.170716	-1.192704
C		1.113501	0.728338	-0.396652
C		1.560631	0.391207	0.909848
C		2.515427	1.521309	0.954976
C		2.050800	1.888426	-0.463611
N		1.141100	-0.576200	1.756297
O		3.309491	1.982690	1.780955
O		2.304378	2.768759	-1.288864
C		1.768438	-0.880216	2.973974
C		1.014944	-1.000807	4.156648
C		1.609674	-1.326569	5.378372
C		2.993531	-1.525226	5.445902
C		3.766137	-1.417512	4.283648
C		3.153605	-1.117929	3.063740
H		0.176956	0.332873	-3.300119
H		-0.075518	1.831848	-2.432542
H		-0.284074	-0.650289	-0.819380
H		0.253728	-1.056097	1.509939
N		-2.269118	-1.170740	0.663682
O		-2.286436	-0.036321	1.204694
O		-3.318178	-1.732800	0.264211
O		-1.131647	-1.774753	0.498803
F		-1.050898	2.770606	-0.734182
F		-2.817166	4.506255	0.185612
F		-5.463740	4.320000	-0.406478
F		-6.392301	2.312949	-1.941940
F		-5.911113	0.289627	-3.380540
F		-5.552031	-1.888113	-4.622848
F		-3.868167	-3.829155	-5.428171
F		-1.245124	-3.775233	-4.717299
F		-0.222660	-1.796898	-3.281861
F		-0.318075	-0.782794	4.117329
F		0.860639	-1.424843	6.495999
F		3.577962	-1.827862	6.622004
F		5.096016	-1.638423	4.339651
F		3.913228	-1.095611	1.948066
Compound			5 <sup>-</sup> -Cl <sup>-</sup>	
Atom	X		Y	Z
C		-3.740165	-2.652761	-4.413938
C		-4.500267	-1.520836	-4.162249
C		-3.960398	-0.405565	-3.430493
C		-2.574251	-0.447393	-2.965970

C	-1.866364	-1.679135	-3.181960
C	-2.425763	-2.734978	-3.895962
C	-4.726787	0.750580	-3.163625
C	-4.239603	1.826421	-2.383059
C	-2.831382	1.810933	-1.988794
C	-2.003075	0.710736	-2.353708
C	-5.075728	2.932969	-2.021030
C	-4.569568	4.021569	-1.344088
C	-3.199335	4.037757	-0.990744
C	-2.366614	2.958869	-1.244307
C	-0.489077	0.821161	-2.253674
N	0.035754	0.355519	-0.957452
C	1.114516	0.834545	-0.358441
C	1.791781	0.450735	0.845260
C	2.793879	1.539106	0.687161
C	2.087134	1.931948	-0.604876
N	1.493912	-0.578726	1.668967
O	3.783111	1.968146	1.300481
O	2.271109	2.781109	-1.485854
C	2.103763	-0.978748	2.875191
C	1.607423	-2.148355	3.491180
C	2.162789	-2.594814	4.695684
C	3.215236	-1.887630	5.300487
C	3.703826	-0.725618	4.681090
C	3.158046	-0.263059	3.475729
H	-0.168498	1.855323	-2.383330
H	-0.423143	-0.460590	-0.536185
H	0.726867	-1.190379	1.351695
H	0.790999	-2.699011	3.021343
H	1.769551	-3.500031	5.160994
H	4.521417	-0.166085	5.139070
H	3.549327	0.635260	3.000107
H	3.647005	-2.236764	6.239170
Cl	-0.901647	-2.496776	0.340011
O	-1.094637	2.999727	-0.735974
H	-1.034804	3.815807	-0.196665
O	-2.730972	5.096149	-0.203990
H	-2.363993	5.796483	-0.778990
O	-5.413981	5.055018	-1.020299
H	-4.917577	5.684630	-0.459479
O	-6.438474	2.877182	-2.310268
H	-6.833550	3.763062	-2.197933
O	-5.985885	0.795223	-3.726469
H	-6.476373	1.586496	-3.393273
O	-5.788860	-1.592011	-4.646062
H	-6.235475	-0.736156	-4.446719
O	-4.250659	-3.723321	-5.106369
H	-5.169600	-3.491347	-5.350525
O	-1.726739	-3.895555	-4.070217
H	-0.862982	-3.733231	-3.625255
O	-0.586587	-1.949028	-2.696387
H	-0.656294	-2.185298	-1.725776
H	-0.031214	0.222626	-3.048079
Compound		5 <sup>-</sup> Br <sup>-</sup>	
Atom	X	Y	Z
C	-3.624903	-2.657632	-4.381723
C	-4.420275	-1.545960	-4.148682
C	-3.927262	-0.417865	-3.404150
C	-2.554721	-0.429669	-2.902522
C	-1.824750	-1.655030	-3.070143
C	-2.318581	-2.704566	-3.837798
C	-4.720708	0.726236	-3.167162

C	-4.270939	1.817292	-2.385038
C	-2.867292	1.839923	-1.975399
C	-2.012285	0.753640	-2.314894
C	-5.137847	2.905060	-2.040667
C	-4.664643	4.011759	-1.369024
C	-3.297575	4.066688	-1.006176
C	-2.434749	3.008022	-1.243604
C	-0.502473	0.903841	-2.216715
N	0.017974	0.477979	-0.907885
C	1.159704	0.868312	-0.367146
C	1.845396	0.446518	0.818672
C	2.934449	1.436473	0.601259
C	2.216178	1.866698	-0.674347
N	1.477523	-0.530467	1.676270
O	3.978205	1.786513	1.172837
O	2.432297	2.685383	-1.577261
C	2.101993	-0.993214	2.851221
C	1.497876	-2.086362	3.509875
C	2.062232	-2.590815	4.686548
C	3.226407	-2.015367	5.222714
C	3.819840	-0.926988	4.562312
C	3.268379	-0.409374	3.382106
H	-0.207776	1.942755	-2.373861
H	-0.515245	-0.256478	-0.425532
H	0.626377	-1.051034	1.413642
H	0.594125	-2.532872	3.092354
H	1.587601	-3.436983	5.185870
H	4.724403	-0.470085	4.967526
H	3.737369	0.432214	2.873590
H	3.664019	-2.409444	6.140678
Br	-1.341630	-2.168046	0.584831
O	-1.165994	3.088666	-0.729444
H	-1.135169	3.908959	-0.193746
O	-2.862388	5.143874	-0.226043
H	-2.510581	5.848672	-0.805021
O	-5.537536	5.026483	-1.061667
H	-5.061677	5.675294	-0.504939
O	-6.495628	2.812097	-2.343400
H	-6.912246	3.690187	-2.248745
O	-5.967291	0.742704	-3.759065
H	-6.481878	1.523200	-3.437151
O	-5.696531	-1.650203	-4.658709
H	-6.166475	-0.803517	-4.474898
O	-4.088757	-3.737061	-5.093138
H	-5.006399	-3.527329	-5.361080
O	-1.584570	-3.844868	-4.003294
H	-0.743054	-3.670603	-3.522250
O	-0.552602	-1.894524	-2.547535
H	-0.664546	-2.073826	-1.571683
H	-0.028247	0.296628	-2.995616
Compound		5 <sup>-</sup> -NO <sub>3</sub> <sup>-</sup>	
Atom	X	Y	Z
C	-3.320715	-2.511136	-5.062001
C	-4.200708	-1.491305	-4.726952
C	-3.823314	-0.464745	-3.796622
C	-2.475352	-0.466886	-3.233531
C	-1.637874	-1.585225	-3.556017
C	-2.046656	-2.571507	-4.449383
C	-4.708720	0.571280	-3.415911
C	-4.384522	1.525905	-2.422017
C	-3.020372	1.539015	-1.899495
C	-2.063222	0.614242	-2.397002

C	-5.338115	2.479819	-1.936501
C	-4.995459	3.407744	-0.975983
C	-3.680761	3.415564	-0.448002
C	-2.731853	2.495296	-0.857617
C	-0.584491	0.862075	-2.176533
N	-0.058468	0.077401	-1.021720
C	1.251761	0.130657	-0.694283
C	1.955877	-0.157233	0.512528
C	3.274441	0.112497	-0.156543
C	2.493938	0.410808	-1.440877
N	1.455082	-0.487785	1.714827
O	4.466214	0.107768	0.156644
O	2.787718	0.746115	-2.593952
C	2.120710	-0.798593	2.919338
C	1.314519	-1.015101	4.057606
C	1.906819	-1.341325	5.282934
C	3.302704	-1.453266	5.391403
C	4.098246	-1.235265	4.254787
C	3.520811	-0.911526	3.019473
H	-0.014304	0.563614	-3.061962
H	-0.394360	1.924713	-2.006985
H	-0.707876	0.004777	-0.227254
H	0.418330	-0.483477	1.772033
H	0.231070	-0.923592	3.976232
H	1.272480	-1.506219	6.155117
H	5.184075	-1.319391	4.324150
H	4.148304	-0.739672	2.146832
N	-1.988667	0.469907	2.098697
O	-1.283878	1.353586	2.657316
O	-3.241840	0.532449	2.092088
O	-1.404620	-0.525027	1.515587
H	3.763069	-1.707183	6.346871
O	-0.385408	-1.834204	-3.015321
H	-0.295412	-1.414898	-2.122719
O	-1.245273	-3.648772	-4.719975
H	-0.448156	-3.542417	-4.158489
O	-3.678238	-3.507015	-5.937304
H	-4.593458	-3.315626	-6.226208
O	-5.437579	-1.592375	-5.331170
H	-5.976372	-0.818273	-5.047878
O	-5.922555	0.604439	-4.070077
H	-6.514219	1.277379	-3.657426
O	-6.640601	2.441705	-2.421329
H	-7.170720	3.143399	-1.996893
O	-5.951662	4.292263	-0.539191
H	-5.566661	4.804730	0.200665
O	-3.426788	4.262242	0.633417
H	-2.907801	5.034148	0.333321
O	-1.522228	2.460431	-0.206978
H	-1.625425	2.939405	0.641201
Compound		6-Cl <sup>-</sup>	
Atom	X	Y	Z
C	-3.588978	-2.788946	-4.341411
C	-4.381807	-1.810218	-3.780844
C	-3.804007	-0.642345	-3.183270
C	-2.358258	-0.477184	-3.181320
C	-1.575992	-1.529162	-3.769078
C	-2.169213	-2.643822	-4.328317
C	-4.612611	0.339783	-2.589799
C	-4.061562	1.478553	-1.979893
C	-2.618853	1.660017	-1.973474
C	-1.789586	0.685364	-2.593142

C	-4.900152	2.460812	-1.358377
C	-4.359658	3.570763	-0.743909
C	-2.944194	3.751521	-0.726537
C	-2.103236	2.830903	-1.321482
C	-0.282623	0.852684	-2.565179
N	0.276562	0.262024	-1.331366
C	0.978112	0.940397	-0.433710
C	1.524710	0.588887	0.847979
C	2.124880	1.924006	1.003405
C	1.516355	2.325947	-0.321791
N	1.454478	-0.567119	1.526863
O	2.869478	2.471896	1.848682
O	1.475990	3.349495	-1.016762
C	1.772360	-0.825503	2.889301
C	0.837806	-1.571567	3.657225
C	1.136917	-1.885163	4.997479
C	2.342386	-1.456811	5.573973
C	3.257582	-0.718369	4.817260
C	2.986530	-0.406651	3.477075
H	-4.039064	-3.675615	-4.789688
H	-5.468970	-1.909246	-3.775370
H	-0.489608	-1.466844	-3.768606
H	-1.544403	-3.426317	-4.761262
H	-5.697086	0.209640	-2.592788
H	-5.980620	2.305946	-1.379100
H	-5.006800	4.310250	-0.270425
H	-2.519887	4.629124	-0.236379
H	-1.031331	3.009561	-1.284306
H	0.190158	0.371079	-3.428545
H	0.016137	1.903130	-2.593805
H	-0.019970	-0.695007	-1.089598
H	0.929975	-1.313195	1.039859
Cl	-0.496107	-2.636495	0.099528
O	-0.394277	-1.972009	3.197678
H	-0.411423	-2.113212	2.215317
O	0.222219	-2.604528	5.736052
H	0.592232	-2.719531	6.632880
O	2.563118	-1.790792	6.894637
H	3.436701	-1.447865	7.163105
O	4.430516	-0.317844	5.419593
H	4.926241	0.182980	4.736644
O	3.984535	0.267661	2.801363
H	3.636854	1.168412	2.512993
Compound		$6\text{-Br}^-$	
Atom	X	Y	Z
C	-3.447456	-2.847748	-4.180116
C	-4.134816	-2.050899	-3.289749
C	-3.543854	-0.860051	-2.754530
C	-2.205985	-0.470824	-3.171805
C	-1.529843	-1.338309	-4.094720
C	-2.126939	-2.484381	-4.580584
C	-4.227264	-0.081827	-1.808212
C	-3.647017	1.063865	-1.239359
C	-2.316558	1.474219	-1.656337
C	-1.618017	0.701990	-2.625019
C	-4.342270	1.825090	-0.244146
C	-3.763775	2.934467	0.336402
C	-2.456833	3.341937	-0.064756
C	-1.759661	2.638795	-1.028538
C	-0.158262	1.007691	-2.904135
N	0.629313	0.342618	-1.836022
C	1.270369	1.002825	-0.875121

ARTICLE				Journal Name
C	1.662423	0.628472	0.451173	
C	2.345670	1.915286	0.662213	
C	1.869751	2.357892	-0.710903	
N	1.408301	-0.490924	1.148487	
O	3.052797	2.404175	1.570882	
O	1.924761	3.388659	-1.391503	
C	1.489048	-0.675174	2.558750	
C	0.348007	-1.188456	3.231433	
C	0.415805	-1.419199	4.619530	
C	1.588466	-1.127271	5.332943	
C	2.701595	-0.601474	4.668876	
C	2.661101	-0.375923	3.285585	
H	-3.903286	-3.756733	-4.574995	
H	-5.141688	-2.319322	-2.964013	
H	-0.516283	-1.109871	-4.417544	
H	-1.579643	-3.123954	-5.274669	
H	-5.222151	-0.392630	-1.481285	
H	-5.342217	1.500304	0.050107	
H	-4.299251	3.502203	1.098484	
H	-2.002048	4.221201	0.394046	
H	-0.770366	2.991499	-1.309331	
H	0.168587	0.630478	-3.877228	
H	0.069241	2.075972	-2.885552	
H	0.267835	-0.588596	-1.573976	
H	0.847792	-1.193959	0.640110	
Br	-0.771105	-2.425307	-0.464999	
O	-0.875169	-1.403489	2.642677	
H	-0.807746	-1.659930	1.684781	
O	-0.694943	-1.910436	5.271026	
H	-0.469080	-1.993211	6.217928	
O	1.575893	-1.367620	6.691862	
H	2.447478	-1.129216	7.061061	
O	3.828510	-0.315240	5.408396	
H	4.482006	0.051569	4.775190	
O	3.820212	0.111003	2.710473	
H	3.631122	1.029239	2.346086	
Compound	$6^{-}\text{NO}_3^{-}$			
Atom	X	Y	Z	
C	-3.522754	-2.733493	-4.677929	
C	-4.327369	-1.802821	-4.056020	
C	-3.763578	-0.679916	-3.366591	
C	-2.319155	-0.504672	-3.339003	
C	-1.524199	-1.507125	-3.992649	
C	-2.104192	-2.582037	-4.637119	
C	-4.585438	0.242388	-2.700915	
C	-4.049552	1.331776	-1.994979	
C	-2.609999	1.530220	-1.972284	
C	-1.766548	0.615839	-2.661249	
C	-4.900413	2.247158	-1.293600	
C	-4.374120	3.309473	-0.589000	
C	-2.961684	3.510165	-0.561170	
C	-2.109925	2.653332	-1.231260	
C	-0.262510	0.800819	-2.602854	
N	0.273068	0.206603	-1.359880	
C	0.924900	0.887957	-0.426719	
C	1.390181	0.551171	0.889996	
C	2.056103	1.858925	1.028804	
C	1.507196	2.255036	-0.324175	
N	1.217996	-0.561720	1.620287	
O	2.819735	2.381883	1.871718	
O	1.527449	3.263577	-1.041645	
C	1.614116	-0.797017	2.966859	



Journal Name				ARTICLE
C	0.677345	-1.414544	3.835222	
C	1.069216	-1.769437	5.141428	
C	2.364974	-1.483087	5.593728	
C	3.275344	-0.837067	4.749797	
C	2.911348	-0.495452	3.440771	
H	0.236232	0.333860	-3.458555	
H	0.022997	1.855811	-2.613891	
H	-0.027041	-0.746941	-1.128185	
H	0.622473	-1.280466	1.175705	
N	-1.807795	-1.866966	0.343990	
O	-2.001965	-1.000653	1.257571	
O	-2.762065	-2.377744	-0.273088	
O	-0.596905	-2.201678	0.057959	
H	-0.438163	-1.439462	-3.976420	
H	-1.469521	-3.327716	-5.118132	
H	-3.962255	-3.587579	-5.194777	
H	-5.413842	-1.908789	-4.068279	
H	-5.668298	0.100239	-2.718768	
H	-5.978678	2.079671	-1.326631	
H	-5.030372	3.997377	-0.054294	
H	-2.548515	4.352256	-0.003866	
H	-1.041334	2.847390	-1.187519	
O	3.900763	0.083541	2.668393	
H	3.609357	1.016169	2.435121	
O	-0.605045	-1.734667	3.479794	
H	-0.904431	-1.300604	2.637870	
O	0.152483	-2.383791	5.967591	
H	0.584920	-2.531570	6.830899	
O	2.674287	-1.840448	6.889950	
H	3.594578	-1.574295	7.077157	
O	4.531228	-0.551963	5.242025	
H	5.011030	-0.102090	4.514096	
Compound		$7\text{-Cl}^-$		
Atom	X	Y	Z	
C	-3.504541	-2.635370	-4.580254	
C	-4.334191	-1.564342	-4.284376	
C	-3.867173	-0.450352	-3.502082	
C	-2.483988	-0.429007	-3.029015	
C	-1.703419	-1.605236	-3.290051	
C	-2.189775	-2.660312	-4.056221	
C	-4.702226	0.647134	-3.195886	
C	-4.286876	1.710932	-2.358918	
C	-2.885203	1.757278	-1.947054	
C	-1.986543	0.733264	-2.363177	
C	-5.188215	2.749702	-1.955894	
C	-4.753104	3.827695	-1.214831	
C	-3.392360	3.898426	-0.832108	
C	-2.497862	2.882172	-1.129332	
C	-0.482089	0.946776	-2.273854	
N	0.100696	0.432139	-1.021879	
C	1.094169	0.975795	-0.344439	
C	1.768351	0.544165	0.848185	
C	2.638065	1.724332	0.843676	
C	1.944240	2.203419	-0.416162	
N	1.588157	-0.584099	1.561741	
O	3.589785	2.135615	1.551306	
O	2.058843	3.166810	-1.180632	
C	1.996123	-0.884563	2.890556	
C	1.034111	-1.468043	3.757994	
C	1.399603	-1.810235	5.073362	
C	2.704835	-1.567799	5.529075	
C	3.649764	-0.992222	4.674386	

ARTICLE				Journal Name
C	3.310940		-0.658324	3.354031
H	-0.235829		2.007494	-2.336493
H	-0.297738		-0.438159	-0.653250
H	0.929434		-1.251724	1.137294
Cl	-0.734865		-2.486201	0.290790
O	-1.240186		2.952891	-0.590572
H	-1.226781		3.739205	-0.006138
O	-2.997759		4.932220	0.023665
H	-2.656113		5.682220	-0.502132
O	-5.659169		4.795290	-0.856454
H	-5.210310		5.421797	-0.253638
O	-6.540114		2.635517	-2.273985
H	-6.988652		3.487034	-2.108607
O	-5.953660		0.646050	-3.775252
H	-6.493654		1.391430	-3.414374
O	-5.614017		-1.693803	-4.776842
H	-6.111730		-0.873819	-4.549852
O	-3.944419		-3.703918	-5.321840
H	-4.874233		-3.518487	-5.564535
O	-1.422335		-3.767736	-4.277249
H	-0.567838		-3.577225	-3.827283
O	-0.413095		-1.815957	-2.795176
H	-0.481385		-2.122017	-1.851514
O	4.340790		-0.171677	2.576282
H	4.118822		0.759257	2.250441
O	4.922449		-0.777855	5.157307
H	5.424601		-0.371429	4.418448
O	2.991880		-1.916905	6.833054
H	3.930810		-1.718433	7.011370
O	0.455924		-2.369795	5.907502
H	0.884785		-2.534757	6.769657
O	-0.284358		-1.675832	3.416265
H	-0.400795		-1.837930	2.450357
H	0.004134		0.435572	-3.111623
Compound			<b>7-Br<sup>-</sup></b>	
Atom	X	Y	Z	
C	-3.417761		-2.599887	-4.654071
C	-4.276748		-1.565550	-4.314130
C	-3.835785		-0.466355	-3.497008
C	-2.452939		-0.427978	-3.026767
C	-1.651747		-1.584844	-3.307337
C	-2.096654		-2.602661	-4.144389
C	-4.692262		0.604221	-3.157682
C	-4.293741		1.654586	-2.295746
C	-2.887171		1.729433	-1.905211
C	-1.971388		0.738068	-2.358029
C	-5.216084		2.656525	-1.850562
C	-4.797327		3.725132	-1.086857
C	-3.432468		3.823633	-0.724580
C	-2.515041		2.841385	-1.063295
C	-0.472555		0.989924	-2.294289
N	0.123993		0.473319	-1.052670
C	1.178276		0.948044	-0.420297
C	1.840624		0.487146	0.766561
C	2.818543		1.576096	0.708809
C	2.125502		2.098306	-0.537658
N	1.573620		-0.596547	1.521144
O	3.827911		1.903374	1.379064
O	2.284462		3.043565	-1.316835
C	1.959129		-0.864639	2.863607
C	0.943925		-1.257275	3.775745
C	1.287895		-1.563172	5.105589

C	2.621864	-1.462475	5.531608
C	3.616867	-1.062131	4.634536
C	3.298231	-0.769812	3.299413
H	-0.255899	2.058011	-2.352849
H	-0.349413	-0.335896	-0.632042
H	0.843058	-1.212076	1.138303
Br	-1.089884	-2.322581	0.321967
O	-1.249109	2.934985	-0.544884
H	-1.253365	3.698824	0.068940
O	-3.053369	4.844229	0.153866
H	-2.741938	5.617986	-0.356176
O	-5.723023	4.657100	-0.686191
H	-5.282774	5.273787	-0.067109
O	-6.568844	2.513349	-2.151313
H	-7.039854	3.343447	-1.944748
O	-5.947500	0.590803	-3.729448
H	-6.503505	1.309047	-3.339687
O	-5.557770	-1.715793	-4.797899
H	-6.074280	-0.915754	-4.543740
O	-3.829839	-3.650022	-5.436979
H	-4.765801	-3.482412	-5.668668
O	-1.296668	-3.674880	-4.418385
H	-0.450814	-3.484181	-3.952337
O	-0.351816	-1.776428	-2.830317
H	-0.424921	-2.063325	-1.882133
O	4.361659	-0.444850	2.482320
H	4.236548	0.488196	2.115882
O	4.912957	-0.973855	5.093400
H	5.449204	-0.671853	4.328994
O	2.885270	-1.764232	6.852216
H	3.844456	-1.674096	7.009443
O	0.297194	-1.940004	5.986266
H	0.718341	-2.101149	6.853000
O	-0.399970	-1.285345	3.471104
H	-0.568711	-1.519867	2.527692
H	0.013921	0.497473	-3.143378
Compound		$7^{-}\text{NO}_3^{-}$	
Atom	X	Y	Z
C	-2.868345	-2.522535	-5.163764
C	-3.860414	-1.591057	-4.891554
C	-3.644104	-0.534947	-3.942269
C	-2.343344	-0.410710	-3.288156
C	-1.381908	-1.440337	-3.558416
C	-1.636340	-2.460022	-4.471142
C	-4.646925	0.413595	-3.630854
C	-4.482642	1.400179	-2.628883
C	-3.169268	1.534127	-2.003942
C	-2.098903	0.697171	-2.420949
C	-5.550452	2.269119	-2.228760
C	-5.365748	3.226454	-1.254001
C	-4.101538	3.351353	-0.627712
C	-3.047082	2.516332	-0.953161
C	-0.673048	1.067256	-2.069103
N	-0.190708	0.313104	-0.875420
C	1.053578	0.479425	-0.395866
C	1.683863	0.101501	0.832400
C	3.004467	0.541763	0.323416
C	2.323782	0.998797	-0.958610
N	1.179075	-0.435738	1.952027
O	4.178574	0.470831	0.733638
O	2.678270	1.539279	-2.011087
C	1.865208	-0.757853	3.157387

C	1.245533	-0.425279	4.389440
C	1.847972	-0.826168	5.599640
C	3.063595	-1.523458	5.590597
C	3.689821	-1.824223	4.375610
C	3.097913	-1.451078	3.162712
H	-0.002665	0.829385	-2.900687
H	-0.588340	2.138000	-1.873915
H	-0.910126	0.072867	-0.182686
H	0.153372	-0.575487	1.939422
N	-2.255717	0.497542	2.008490
O	-1.560613	1.356154	2.641936
O	-3.481162	0.655807	1.847367
O	-1.667742	-0.539606	1.523779
O	3.761729	-1.850589	2.016009
H	4.086970	-1.029671	1.547889
O	0.063459	0.251556	4.507010
H	-0.290398	0.608507	3.650749
O	1.227264	-0.505546	6.787603
H	1.787078	-0.841385	7.514225
O	3.602512	-1.867991	6.812466
H	4.441653	-2.343596	6.662456
O	4.892877	-2.495778	4.412247
H	5.166705	-2.614253	3.477806
O	-1.896369	2.591938	-0.207236
H	-2.104824	3.106898	0.599398
O	-4.000607	4.216730	0.464698
H	-3.587527	5.056879	0.183873
O	-6.427678	4.023412	-0.900854
H	-6.159599	4.548663	-0.119670
O	-6.802562	2.118868	-2.813758
H	-7.430724	2.750490	-2.413603
O	-5.812236	0.327053	-4.362577
H	-6.490727	0.944718	-3.999816
O	-5.037763	-1.806596	-5.577825
H	-5.666639	-1.089300	-5.332771
O	-3.070944	-3.545826	-6.056445
H	-3.979906	-3.442725	-6.404311
O	-0.718118	-3.451696	-4.688441
H	0.027042	-3.269914	-4.076770
O	-0.137488	-1.562275	-2.954074
H	-0.153023	-1.192062	-2.039207

Compound	1		
Atom	X	Y	Z
C	-3.872315	-2.776830	-4.108103
C	-4.584548	-1.688172	-3.651451
C	-3.915862	-0.529097	-3.137514
C	-2.461559	-0.492229	-3.109915
C	-1.765512	-1.653984	-3.590416
C	-2.445776	-2.755898	-4.071058
C	-4.643750	0.568562	-2.651630
C	-4.004187	1.703276	-2.126479
C	-2.551072	1.756431	-2.093851
C	-1.801319	0.661627	-2.605063
C	-4.763535	2.806946	-1.616821
C	-4.138090	3.915109	-1.085607
C	-2.712812	3.970831	-1.042418
C	-1.945885	2.930521	-1.530564
C	-0.286469	0.692981	-2.556423
N	0.209186	0.124751	-1.281957
C	0.954458	0.796045	-0.405168
C	1.470360	0.500827	0.895670
C	2.143768	1.832549	0.979429

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C	1.590520	2.137318	-0.406991	
N	1.314621	-0.615520	1.640554	
O	2.844623	2.450117	1.786901	
O	1.641249	3.090280	-1.192187	
C	1.811255	-0.938902	2.925852	
C	1.475306	-2.206700	3.444502	
C	1.933856	-2.588453	4.710488	
C	2.729142	-1.715988	5.470801	
C	3.058812	-0.456153	4.946093	
C	2.607809	-0.057939	3.680156	
H	-4.391553	-3.654851	-4.494168	
H	-5.676062	-1.690052	-3.667670	
H	-0.677421	-1.683646	-3.576171	
H	-1.885619	-3.622009	-4.426165	
H	-5.735245	0.535411	-2.674474	
H	-5.852823	2.747234	-1.656276	
H	-4.725524	4.748298	-0.697742	
H	-2.221471	4.847820	-0.618312	
H	-0.863351	3.016774	-1.477551	
H	0.152333	0.124876	-3.384533	
H	0.109487	1.707593	-2.632396	
H	-0.141193	-0.799670	-1.041126	
H	0.749473	-1.352550	1.224430	
H	0.857394	-2.889817	2.858598	
H	1.666688	-3.571569	5.100188	
H	3.675960	0.232233	5.525595	
H	2.869868	0.921538	3.283962	
H	3.086111	-2.013909	6.457098	
Compound	<b>2</b>			
Atom	X	Y	Z	
C	-3.727452	-2.700503	-4.425414	
C	-4.495717	-1.587089	-4.176507	
C	-3.968861	-0.461491	-3.463943	
C	-2.577719	-0.472582	-3.018512	
C	-1.852569	-1.687309	-3.265070	
C	-2.394957	-2.753693	-3.947116	
C	-4.735882	0.679891	-3.182291	
C	-4.261543	1.772188	-2.436937	
C	-2.864173	1.752194	-2.010204	
C	-2.017697	0.668918	-2.379591	
C	-5.089861	2.892976	-2.107582	
C	-4.604113	3.951180	-1.375010	
C	-3.263363	3.930809	-0.920802	
C	-2.434394	2.871705	-1.221999	
C	-0.508609	0.772120	-2.204419	
N	-0.055540	0.271473	-0.893292	
C	1.009358	0.757919	-0.253971	
C	1.676043	0.412048	0.960368	
C	2.672334	1.512033	0.778688	
C	1.948447	1.877618	-0.514720	
N	1.390376	-0.577432	1.835075	
O	3.656346	1.955953	1.376498	
O	2.088846	2.729238	-1.396919	
C	2.028261	-0.950634	3.041840	
C	1.504867	-2.067611	3.725543	
C	2.086215	-2.487218	4.927431	
C	3.191166	-1.802784	5.458999	
C	3.706104	-0.692777	4.770548	
C	3.135030	-0.258313	3.566456	
H	-0.182646	1.808474	-2.291508	
H	-0.490797	-0.584653	-0.560871	
H	0.584404	-1.154641	1.604591	

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H	0.647383		-2.605156	3.315884
H	1.671962		-3.352346	5.446734
H	4.564341		-0.151447	5.171725
H	3.543705		0.602938	3.040909
H	3.643655		-2.130191	6.395494
F	-1.195076		2.924195	-0.680205
F	-2.822968		4.949389	-0.159891
F	-5.387016		4.999063	-1.060194
F	-6.384044		2.947016	-2.490141
F	-6.003130		0.727223	-3.647188
F	-5.771241		-1.602810	-4.619428
F	-4.226842		-3.758123	-5.090351
F	-1.685560		-3.881603	-4.133165
F	-0.604366		-1.878698	-2.766505
H	-0.005571		0.220638	-3.004708
Compound			<b>3</b>	
Atom	X	Y	Z	
C	-3.671550	-2.671540	-4.560672	
C	-4.451694	-1.655578	-4.050612	
C	-3.860257	-0.526589	-3.394677	
C	-2.412464	-0.441576	-3.277219	
C	-1.644050	-1.528602	-3.818525	
C	-2.251363	-2.604192	-4.436867	
C	-4.657972	0.495180	-2.855735	
C	-4.095338	1.598108	-2.192917	
C	-2.649720	1.699139	-2.069606	
C	-1.828991	0.683164	-2.631819	
C	-4.926021	2.622325	-1.631338	
C	-4.376594	3.698024	-0.966196	
C	-2.959344	3.799984	-0.834188	
C	-2.125095	2.836997	-1.368232	
C	-0.321805	0.764498	-2.491320	
N	0.126674	0.098429	-1.247309	
C	0.803981	0.706871	-0.276400	
C	1.255595	0.331993	1.018208	
C	1.868631	1.654860	1.273912	
C	1.401577	2.072347	-0.124848	
N	1.133630	-0.799520	1.753311	
O	2.467604	2.186573	2.211559	
O	1.451126	3.086930	-0.820852	
C	1.780584	-0.989928	2.992051	
C	1.043372	-1.326397	4.140920	
C	1.665246	-1.536903	5.374529	
C	3.053377	-1.390037	5.483320	
C	3.809455	-1.055617	4.353420	
C	3.176619	-0.876429	3.120019	
H	0.034410	1.795680	-2.451717	
H	-0.187578	-0.859744	-1.112279	
H	0.465020	-1.511324	1.468967	
F	-0.299530	-1.443054	4.054710	
F	0.934774	-1.854976	6.461497	
F	5.148449	-0.938124	4.453224	
F	3.932537	-0.617762	2.034122	
F	3.660653	-1.578242	6.669651	
H	-1.051589	2.956238	-1.244235	
H	-2.528228	4.650902	-0.304639	
H	-5.017966	4.470461	-0.539965	
H	-6.008109	2.527931	-1.740277	
H	-5.744225	0.426183	-2.946375	
H	-5.539570	-1.694057	-4.132379	
H	-4.132404	-3.527422	-5.055273	
H	-1.637641	-3.413303	-4.835253	

H		-0.558081		-1.521412		-3.743241
H		0.185971		0.292856		-3.340252
Compound				<b>4</b>		
Atom		X		Y		Z
C		-4.682505		3.551152		-0.110009
C		-5.188394		2.309464		-0.416850
C		-4.437602		1.115413		-0.165935
C		-3.120999		1.205775		0.460279
C		-2.634146		2.534851		0.701925
C		-3.381814		3.661451		0.440718
C		-4.923090		-0.162565		-0.484288
C		-4.186114		-1.344118		-0.298437
C		-2.877446		-1.238910		0.343233
C		-2.398207		0.025092		0.789468
C		-4.682382		-2.627174		-0.696255
C		-3.943765		-3.771545		-0.503281
C		-2.658622		-3.683951		0.084027
C		-2.148441		-2.467093		0.482240
C		-1.187335		0.113422		1.708760
N		0.078616		0.244543		0.963597
C		1.235318		-0.261702		1.389478
C		2.563272		-0.258808		0.889991
C		3.072086		-1.078026		2.014326
C		1.641125		-1.085156		2.572838
N		3.131086		0.265939		-0.223261
O		4.160681		-1.555612		2.338914
O		1.062141		-1.568616		3.543997
C		4.520671		0.255887		-0.460587
C		5.042158		-0.293814		-1.644845
C		6.414583		-0.299240		-1.907612
C		7.301775		0.233142		-0.964274
C		6.806852		0.786251		0.222865
C		5.429264		0.811437		0.458260
F		4.198196		-0.836872		-2.549153
F		6.888465		-0.835933		-3.049383
F		7.658746		1.320597		1.120340
F		4.972731		1.406392		1.578724
F		8.626600		0.220340		-1.201675
F		-0.885164		-2.492118		0.968422
F		-1.929960		-4.807387		0.215365
F		-4.409798		-4.974753		-0.884228
F		-5.888137		-2.761522		-1.289690
F		-6.165667		-0.261333		-1.004355
F		-6.416513		2.261665		-0.976077
F		-5.388235		4.670906		-0.351015
F		-2.874999		4.887901		0.661675
F		-1.367158		2.755057		1.137480
H		-1.112732		-0.777733		2.331458
H		-1.303229		0.960328		2.391881
H		0.079987		0.883281		0.172778
H		2.533798		0.575181		-0.986793
Compound				<b>5</b>		
Atom		X		Y		Z
C		-3.429501		-2.397311		-4.804221
C		-4.271286		-1.320206		-4.561872
C		-3.883017		-0.263182		-3.670597
C		-2.564229		-0.302318		-3.043434
C		-1.770562		-1.471976		-3.273119
C		-2.186756		-2.484373		-4.132988
C		-4.725223		0.841115		-3.398258
C		-4.395483		1.835887		-2.445914
C		-3.067539		1.793594		-1.840596

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C	-2.135810	0.796608	-2.237980	
C	-5.304635	2.883976	-2.084929	
C	-4.953922	3.851567	-1.166220	
C	-3.679237	3.799465	-0.549741	
C	-2.781947	2.784567	-0.834119	
C	-0.656023	1.009872	-1.987943	
N	-0.167564	0.283937	-0.774675	
C	1.157806	0.223928	-0.505803	
C	1.908206	-0.102452	0.658596	
C	3.203466	0.041581	-0.091443	
C	2.372731	0.365299	-1.338175	
N	1.474986	-0.404643	1.898696	
O	4.405248	-0.049646	0.151279	
O	2.620910	0.623634	-2.517710	
C	2.197648	-0.719151	3.076065	
C	1.444316	-0.999183	4.234431	
C	2.095740	-1.317257	5.431669	
C	3.498013	-1.359877	5.487294	
C	4.239447	-1.079337	4.328623	
C	3.602907	-0.758457	3.121820	
H	-0.436468	2.075321	-1.877109	
H	-0.793751	0.395240	0.023173	
H	0.464638	-0.412840	2.024841	
H	0.353874	-0.968048	4.197626	
H	1.502054	-1.532035	6.321030	
H	5.329693	-1.108667	4.357260	
H	4.189198	-0.543686	2.230618	
H	4.004965	-1.608175	6.420147	
O	-1.633014	2.692495	-0.082191	
H	-1.697937	3.376315	0.616874	
O	-3.411424	4.684886	0.498139	
H	-2.950700	5.474850	0.152564	
O	-5.871336	4.825710	-0.854888	
H	-5.533548	5.326070	-0.085027	
O	-6.573079	2.902878	-2.650981	
H	-7.089201	3.644171	-2.279466	
O	-5.898703	0.901841	-4.117399	
H	-6.467259	1.635696	-3.783463	
O	-5.484379	-1.395922	-5.214203	
H	-5.991252	-0.577209	-5.008724	
O	-3.797770	-3.420293	-5.641976	
H	-4.687365	-3.200343	-5.985590	
O	-1.428460	-3.609444	-4.312619	
H	-0.649597	-3.511583	-3.724710	
O	-0.554687	-1.744667	-2.663123	
H	-0.502405	-1.307157	-1.780079	
H	-0.072007	0.637599	-2.834319	
Compound		<b>6</b>		
Atom	X	Y	Z	
C	-3.525403	-2.753686	-4.502273	
C	-4.346489	-1.785034	-3.965299	
C	-3.800819	-0.626388	-3.321650	
C	-2.357325	-0.459289	-3.246644	
C	-1.544878	-1.500023	-3.813598	
C	-2.108306	-2.606632	-4.418536	
C	-4.639064	0.345719	-2.753376	
C	-4.121134	1.476751	-2.101583	
C	-2.680847	1.661170	-2.022462	
C	-1.820875	0.695983	-2.614799	
C	-4.992052	2.448166	-1.508262	
C	-4.485448	3.551078	-0.853755	
C	-3.073115	3.735174	-0.765872	



C	-2.201257	2.824826	-1.331455
C	-0.318083	0.865231	-2.517709
N	0.195430	0.242457	-1.275106
C	0.872557	0.894706	-0.337855
C	1.401870	0.538312	0.943415
C	2.015959	1.864403	1.115520
C	1.407400	2.284360	-0.209710
N	1.333379	-0.600457	1.661331
O	2.780680	2.384086	1.953717
O	1.371920	3.307766	-0.896631
C	1.762819	-0.819343	3.006296
C	0.840290	-1.448398	3.875439
C	1.235296	-1.827684	5.168958
C	2.536317	-1.534693	5.609118
C	3.430744	-0.856510	4.771325
C	3.055979	-0.497027	3.468459
H	-3.951271	-3.632890	-4.987183
H	-5.432364	-1.884668	-4.015414
H	-0.459416	-1.432360	-3.767903
H	-1.461693	-3.379099	-4.837060
H	-5.721758	0.214208	-2.811140
H	-6.069651	2.291055	-1.584138
H	-5.156868	4.282819	-0.402783
H	-2.675823	4.607808	-0.245303
H	-1.133188	3.007172	-1.241136
H	0.195979	0.409607	-3.371180
H	-0.019437	1.915346	-2.498917
H	-0.071745	-0.726739	-1.114893
H	0.944968	-1.416149	1.190515
O	-0.447542	-1.751864	3.487413
H	-0.699307	-1.164267	2.748948
O	0.330461	-2.459042	5.990413
H	0.764906	-2.611310	6.852282
O	2.860783	-1.908748	6.893745
H	3.775140	-1.624060	7.084144
O	4.678936	-0.556163	5.267692
H	5.151877	-0.075539	4.555564
O	4.019000	0.125446	2.701281
H	3.681128	1.040380	2.467884
Compound		<b>7</b>	
Atom	X	Y	Z
C	-2.906219	-2.196999	-5.196016
C	-3.887728	-1.249688	-4.938403
C	-3.707506	-0.254348	-3.918366
C	-2.452483	-0.211972	-3.172604
C	-1.509503	-1.257291	-3.431740
C	-1.724804	-2.216231	-4.416608
C	-4.696627	0.714695	-3.627223
C	-4.569929	1.637648	-2.560417
C	-3.303326	1.680609	-1.836224
C	-2.228447	0.837436	-2.230346
C	-5.624600	2.537271	-2.195486
C	-5.471640	3.439157	-1.162575
C	-4.257681	3.464950	-0.432615
C	-3.224343	2.590378	-0.722074
C	-0.810584	1.190126	-1.824088
N	-0.347160	0.445189	-0.615095
C	0.949504	0.427459	-0.263399
C	1.648453	0.028504	0.913091
C	2.959460	0.230340	0.260769
C	2.222384	0.700794	-0.990114
N	1.222482	-0.378239	2.123613

O	4.142448	0.014522	0.574453
O	2.535886	1.101269	-2.110379
C	2.006217	-0.613130	3.295718
C	1.564328	-0.000491	4.491621
C	2.197081	-0.296437	5.710447
C	3.298692	-1.167387	5.725153
C	3.774676	-1.727446	4.532462
C	3.134042	-1.459573	3.314207
H	-0.728207	2.262791	-1.625829
H	-1.038362	0.422767	0.134832
H	0.226466	-0.572955	2.217587
O	-2.138201	2.551811	0.122336
H	-2.340206	3.149932	0.871839
O	-4.188110	4.261789	0.713118
H	-3.806330	5.132840	0.487004
O	-6.521309	4.270923	-0.856745
H	-6.315381	4.725305	-0.015184
O	-6.832119	2.475881	-2.878991
H	-7.462099	3.115242	-2.493863
O	-5.804625	0.716286	-4.445037
H	-6.482399	1.346448	-4.102935
O	-5.020929	-1.389368	-5.711387
H	-5.639578	-0.659268	-5.479427
O	-3.076209	-3.162970	-6.155809
H	-3.953394	-3.009594	-6.561873
O	-0.827542	-3.227734	-4.623403
H	-0.121513	-3.109871	-3.952912
O	-0.325211	-1.450474	-2.730828
H	-0.432728	-1.164667	-1.796561
O	3.642447	-2.092502	2.197265
H	3.977009	-1.386745	1.574593
O	4.882828	-2.540611	4.599100
H	5.073255	-2.827686	3.681056
O	3.892797	-1.402323	6.944286
H	4.653383	-2.000938	6.815624
O	1.738077	0.291912	6.865519
H	2.311226	-0.002908	7.599883
O	0.490744	0.863303	4.523975
H	0.356632	1.229399	3.628369
H	-0.113909	0.947138	-2.630385
Compound		NO <sub>3</sub> <sup>-</sup>	
Atom	X	Y	Z
N	-2.251342	-1.178709	0.657890
O	-2.290359	-0.033740	1.206973
O	-3.325755	-1.731703	0.265300
O	-1.137923	-1.770462	0.501226
Compound		5 <sub>OH</sub> <sup>-</sup> -Cl <sup>-</sup>	
Atom	X	Y	Z
C	-4.001083	-2.843246	-3.399717
C	-4.676559	-1.655216	-3.228476
C	-3.964277	-0.442466	-2.958326
C	-2.506219	-0.429615	-2.877569
C	-1.854557	-1.707898	-3.090968
C	-2.582361	-2.862677	-3.331598
C	-4.679747	0.746778	-2.748455
C	-4.041142	1.946833	-2.412538
C	-2.592145	1.972725	-2.291573
C	-1.837305	0.792232	-2.561558
C	-4.802203	3.138466	-2.173603
C	-4.184801	4.313796	-1.804837
C	-2.766407	4.343736	-1.652267
C	-1.998919	3.219588	-1.888422

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C	-0.314725	0.870097	-2.499136	
N	0.229987	0.267502	-1.267733	
C	0.846548	0.935116	-0.299062	
C	1.411699	0.525273	0.954123	
C	1.837197	1.920892	1.266466	
C	1.255983	2.344171	-0.073016	
N	1.466641	-0.714953	1.482580	
O	2.419851	2.515516	2.183750	
O	1.181965	3.405040	-0.708380	
C	1.994318	-1.148823	2.718352	
C	1.948423	-2.534415	2.986177	
C	2.448567	-3.030114	4.195750	
C	2.998312	-2.159068	5.150730	
C	3.039736	-0.782299	4.876832	
C	2.542537	-0.268346	3.671286	
H	0.031106	1.902981	-2.531801	
H	0.126104	-0.747166	-1.181879	
H	1.092133	-1.473459	0.889415	
H	1.522443	-3.211371	2.244683	
H	2.407039	-4.103068	4.389692	
H	3.463581	-0.092733	5.608990	
H	2.584585	0.800715	3.468818	
H	3.387422	-2.547049	6.092816	
Cl	0.401430	-3.156541	-0.489412	
H	-2.278402	5.268130	-1.338810	
H	-4.771823	5.214679	-1.620762	
H	-5.887222	3.087847	-2.284007	
H	-5.768620	0.728170	-2.831301	
H	-5.765680	-1.615300	-3.279596	
H	-4.542194	-3.770333	-3.593716	
H	-2.039534	-3.797653	-3.476156	
O	-0.478397	-1.780018	-3.056382	
H	-0.200928	-2.499694	-2.424513	
H	0.129212	0.349016	-3.350862	
H	-0.926144	3.297291	-1.732343	
Compound		$5_{\text{OH}^-}\text{Br}^-$		
Atom	X	Y	Z	
C	-3.809319	-2.601976	-4.531628	
C	-4.554420	-1.497569	-4.179542	
C	-3.975098	-0.442075	-3.403554	
C	-2.574718	-0.510818	-2.994766	
C	-1.894288	-1.764454	-3.260671	
C	-2.476905	-2.738398	-4.051835	
C	-4.748546	0.672423	-3.038805	
C	-4.207575	1.742623	-2.310444	
C	-2.790509	1.736434	-1.998533	
C	-1.980004	0.638364	-2.401401	
C	-5.017739	2.852332	-1.902577	
C	-4.469363	3.917228	-1.218933	
C	-3.075114	3.921321	-0.911964	
C	-2.262350	2.872205	-1.296214	
C	-0.473699	0.783332	-2.270381	
N	-0.028155	0.479387	-0.900655	
C	1.095839	0.914950	-0.341652	
C	1.775591	0.515342	0.851999	
C	2.816547	1.567679	0.665854	
C	2.088419	1.983045	-0.612082	
N	1.448939	-0.494412	1.685534	
O	3.828460	1.962198	1.259393	
O	2.256295	2.837509	-1.491324	
C	2.065369	-0.926957	2.877235	
C	1.522268	-2.072070	3.498715	

C	2.082091	-2.552144	4.687802
C	3.180773	-1.900306	5.272232
C	3.713540	-0.760421	4.648022
C	3.165316	-0.265881	3.456533
H	-0.169433	1.808796	-2.508121
H	-0.504491	-0.314505	-0.448512
H	0.641659	-1.065975	1.391922
H	0.669404	-2.578124	3.043671
H	1.655271	-3.439072	5.158586
H	4.566927	-0.244189	5.091049
H	3.588515	0.615269	2.976122
H	3.615110	-2.275453	6.199585
Br	-1.222885	-2.286600	0.444992
H	-1.209307	2.899064	-1.024500
H	-2.648024	4.761228	-0.362062
H	-5.094521	4.756107	-0.909987
H	-6.081445	2.834955	-2.147613
H	-5.798329	0.707359	-3.338055
H	-5.597648	-1.403622	-4.485270
H	-4.245890	-3.397866	-5.136520
H	-1.912914	-3.651837	-4.242440
O	-0.623548	-2.023961	-2.774313
H	-0.682267	-2.087035	-1.782526
H	0.036774	0.113597	-2.969383
Compound		$\sigma_{\text{OH}^-\text{Cl}^-}$	
Atom	X	Y	Z
C	-3.599140	-2.787160	-4.307737
C	-4.385051	-1.768690	-3.811845
C	-3.798117	-0.599020	-3.226696
C	-2.349391	-0.475437	-3.168103
C	-1.575168	-1.567874	-3.688961
C	-2.177410	-2.682597	-4.238371
C	-4.600935	0.424929	-2.699708
C	-4.041363	1.566975	-2.103731
C	-2.595207	1.706812	-2.041535
C	-1.770000	0.688699	-2.593223
C	-4.874895	2.593639	-1.550836
C	-4.327157	3.707779	-0.950443
C	-2.908825	3.848149	-0.878560
C	-2.072187	2.884020	-1.406990
C	-0.260454	0.811170	-2.506723
N	0.235125	0.238253	-1.238743
C	0.890492	0.936955	-0.313588
C	1.337506	0.617003	1.007574
C	1.896546	1.985911	1.200604
C	1.449864	2.309383	-0.220909
N	1.169978	-0.525827	1.697306
O	2.455435	2.614215	2.107954
O	1.495213	3.298643	-0.966038
C	1.685209	-0.866731	2.968877
C	1.013390	-1.850183	3.745727
C	1.515569	-2.176227	5.017551
C	2.662306	-1.552042	5.522948
C	3.336734	-0.595420	4.746952
C	2.854323	-0.267638	3.474934
H	-4.056563	-3.674457	-4.747331
H	-5.473998	-1.836488	-3.849813
H	-0.488345	-1.536705	-3.642741
H	-1.558803	-3.496337	-4.619584
H	-5.687811	0.326209	-2.745038
H	-5.957805	2.469640	-1.612575
H	-4.970898	4.481205	-0.529367

H	-2.478929	4.729231	-0.399594
H	-0.997878	3.032071	-1.329996
H	0.229003	0.295402	-3.340877
H	0.070535	1.851331	-2.550003
H	-0.101577	-0.700214	-0.987011
H	0.611910	-1.245623	1.208364
Cl	-0.731087	-2.626696	0.252410
O	-0.137421	-2.490073	3.361397
H	-0.316048	-2.450467	2.385283
H	0.981072	-2.926878	5.600667
H	3.031010	-1.821510	6.513500
H	4.240318	-0.113248	5.121123
H	3.371454	0.471398	2.867237
Compound		$\delta_{\text{OH}^{\cdots}\text{Br}^-}$	
Atom	X	Y	Z
C	-3.432923	-2.845829	-4.164489
C	-4.130367	-2.015500	-3.313379
C	-3.532393	-0.824059	-2.787563
C	-2.174292	-0.471750	-3.170645
C	-1.488962	-1.372495	-4.054215
C	-2.094233	-2.517192	-4.533293
C	-4.227740	-0.012110	-1.879115
C	-3.641913	1.135262	-1.319690
C	-2.292749	1.512034	-1.708160
C	-1.578552	0.702294	-2.634252
C	-4.353014	1.935369	-0.366921
C	-3.774278	3.052935	0.197517
C	-2.451137	3.430472	-0.179120
C	-1.737488	2.688086	-1.100481
C	-0.106106	0.973036	-2.882408
N	0.658288	0.307037	-1.796203
C	1.230008	0.990557	-0.796107
C	1.520306	0.642228	0.557683
C	2.106102	1.986266	0.830944
C	1.799643	2.349155	-0.624563
N	1.206995	-0.475099	1.233146
O	2.585950	2.575659	1.804793
O	1.910905	3.358334	-1.333797
C	1.431573	-0.732870	2.608907
C	0.414002	-1.369913	3.367467
C	0.627332	-1.591921	4.739253
C	1.821440	-1.196188	5.354309
C	2.832098	-0.578572	4.599021
C	2.635738	-0.359652	3.230710
H	-3.894833	-3.754977	-4.551989
H	-5.151461	-2.257427	-3.011867
H	-0.461697	-1.170919	-4.350649
H	-1.539598	-3.182725	-5.196528
H	-5.238109	-0.295795	-1.575695
H	-5.366070	1.634298	-0.092774
H	-4.322620	3.650873	0.926724
H	-1.996835	4.317645	0.264781
H	-0.736368	3.018739	-1.364733
H	0.229742	0.580970	-3.846718
H	0.141386	2.036938	-2.871637
H	0.271305	-0.611213	-1.534724
H	0.639473	-1.163402	0.710170
Br	-0.941162	-2.397260	-0.380274
O	-0.810414	-1.734661	2.868182
H	-0.821730	-1.849294	1.881478
H	-0.166883	-2.072636	5.311269
H	1.963118	-1.377987	6.420447

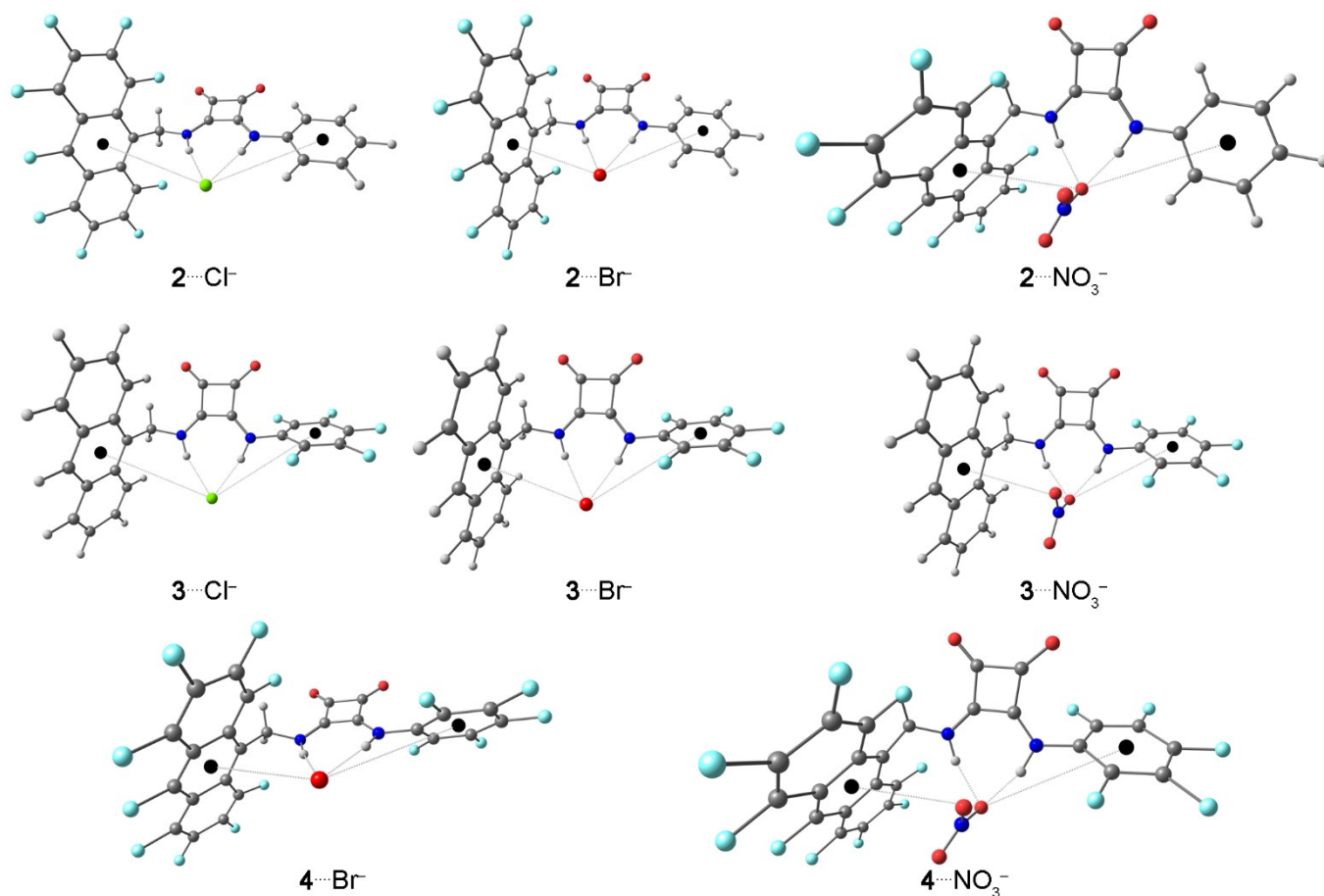
H		3.770065		-0.278272		5.066597
H		3.409491		0.112626		2.627678
Compound				$6_{\text{OH}^{\ominus}\text{NO}_3^{\ominus}}$		
Atom		X		Y		Z
C		-3.492154		-2.731485		-4.670021
C		-4.298128		-1.760260		-4.115392
C		-3.735381		-0.631735		-3.434121
C		-2.289448		-0.495032		-3.343112
C		-1.493727		-1.538631		-3.927981
C		-2.073216		-2.617279		-4.566706
C		-4.560543		0.333568		-2.836896
C		-4.026426		1.429307		-2.139333
C		-2.583977		1.586931		-2.051314
C		-1.735735		0.629167		-2.672201
C		-4.882123		2.391138		-1.509436
C		-4.358805		3.459932		-0.812386
C		-2.943898		3.619774		-0.719098
C		-2.086872		2.717515		-1.319321
C		-0.230470		0.770173		-2.550187
N		0.242312		0.170993		-1.284993
C		0.855957		0.857338		-0.321052
C		1.227440		0.532710		1.020693
C		1.808545		1.886107		1.240841
C		1.435994		2.220344		-0.201376
N		1.007575		-0.579140		1.741957
O		2.336393		2.494215		2.179248
O		1.528764		3.208780		-0.942853
C		1.565055		-0.863297		3.014656
C		0.782997		-1.559289		3.971680
C		1.349240		-1.868624		5.221826
C		2.658775		-1.481878		5.530587
C		3.430233		-0.785233		4.585134
C		2.883944		-0.490914		3.330899
H		0.286101		0.285222		-3.385710
H		0.085114		1.816486		-2.557186
H		-0.113604		-0.761804		-1.051993
H		0.427053		-1.303860		1.284740
N		-1.931544		-1.970792		0.525502
O		-2.136174		-1.383418		1.637059
O		-2.881458		-2.288908		-0.216537
O		-0.720565		-2.226914		0.173693
H		-0.408168		-1.499275		-3.862086
H		-1.438367		-3.394659		-4.994383
H		-3.931339		-3.589163		-5.181210
H		-5.385461		-1.837077		-4.176231
H		-5.645114		0.221813		-2.903239
H		-5.962149		2.253982		-1.590903
H		-5.019302		4.183495		-0.332720
H		-2.533019		4.466344		-0.166839
H		-1.016203		2.880096		-1.226538
H		3.476207		0.026540		2.578045
O		-0.502780		-1.965255		3.754281
H		-0.903118		-1.623293		2.910027
H		0.734812		-2.402654		5.947454
H		3.074937		-1.726526		6.508816
H		4.453593		-0.486964		4.814230
Compound				$7_{\text{OH}^{\ominus}\text{Cl}^{\ominus}}$		
Atom		X		Y		Z
C		-3.788222		-2.839223		-3.410249
C		-4.513981		-1.673224		-3.310649
C		-3.862301		-0.429040		-3.031310
C		-2.413346		-0.357683		-2.862538

C	-1.709080	-1.617286	-3.001823
C	-2.377178	-2.804444	-3.255785
C	-4.632369	0.737163	-2.901350
C	-4.061028	1.969621	-2.563846
C	-2.624179	2.055179	-2.354848
C	-1.810231	0.898031	-2.542957
C	-4.879941	3.136774	-2.410330
C	-4.331623	4.345808	-2.042122
C	-2.928036	4.435075	-1.801519
C	-2.105707	3.335713	-1.953971
C	-0.295747	1.040386	-2.406110
N	0.232220	0.427455	-1.175269
C	0.654098	1.077003	-0.095084
C	1.112909	0.608960	1.176594
C	1.304127	1.999348	1.674479
C	0.883947	2.493404	0.293892
N	1.219583	-0.656789	1.625072
O	1.642664	2.542646	2.733399
O	0.779536	3.595535	-0.260412
C	1.803153	-1.092460	2.840187
C	1.370206	-2.316618	3.417840
C	1.921170	-2.728968	4.642517
C	2.893434	-1.957436	5.291543
C	3.343212	-0.763600	4.705333
C	2.808176	-0.344755	3.481588
H	0.005714	2.087375	-2.402502
H	0.199256	-0.592999	-1.164633
H	0.934485	-1.393431	0.961999
Cl	0.437644	-3.175866	-0.275071
H	-1.051112	3.458577	-1.722826
H	-2.495969	5.385623	-1.484422
H	-4.962330	5.227935	-1.923457
H	-5.953191	3.039837	-2.585564
H	-5.712255	0.674009	-3.051457
H	-5.598647	-1.674448	-3.427395
H	-4.282352	-3.790460	-3.611615
H	-1.795713	-3.723445	-3.342252
O	-0.334907	-1.635688	-2.875057
H	-0.070080	-2.437665	-2.361988
H	3.154255	0.577323	3.020430
H	4.115012	-0.164023	5.188864
H	3.306231	-2.297119	6.242287
H	1.566510	-3.665716	5.073553
O	0.384290	-3.108835	2.880932
H	0.355823	-3.068138	1.890013
H	0.206875	0.561850	-3.251696
Compound		$\tau_{\text{OH}^- \text{Br}^-}$	
Atom	X	Y	Z
C	-4.039827	-2.768665	-3.353390
C	-4.696002	-1.567511	-3.200326
C	-3.963596	-0.360769	-2.960485
C	-2.505301	-0.369968	-2.887758
C	-1.874620	-1.657885	-3.099957
C	-2.620822	-2.805901	-3.309268
C	-4.658257	0.845277	-2.777308
C	-3.999615	2.041382	-2.466418
C	-2.551131	2.043626	-2.341244
C	-1.818029	0.846219	-2.591787
C	-4.739163	3.251494	-2.254787
C	-4.100936	4.421789	-1.905942
C	-2.683306	4.427455	-1.742704
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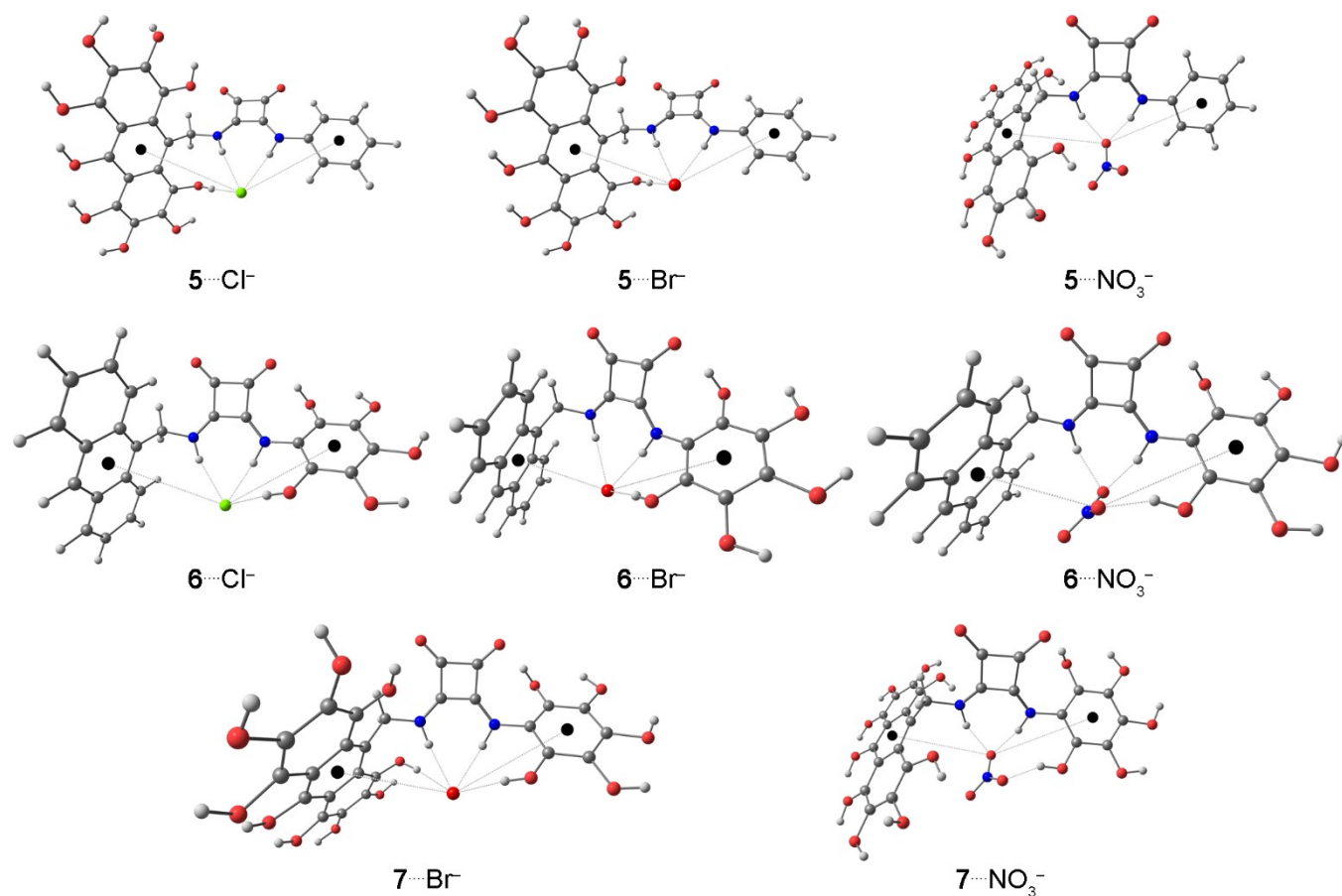
ARTICLE				Journal Name
C	-0.298386	0.888654	-2.487312	
N	0.165493	0.287307	-1.224238	
C	0.809871	0.937488	-0.260656	
C	1.293966	0.524923	1.020181	
C	1.890305	1.862795	1.283530	
C	1.344048	2.311718	-0.068651	
N	1.220473	-0.685160	1.605997	
O	2.564024	2.390311	2.177695	
O	1.367415	3.354101	-0.737350	
C	1.646589	-1.036414	2.910214	
C	2.121919	-2.352077	3.156310	
C	2.578592	-2.685057	4.442703	
C	2.558691	-1.743929	5.479443	
C	2.064068	-0.451136	5.242470	
C	1.600445	-0.108854	3.967192	
H	0.077774	1.910764	-2.514989	
H	-0.026010	-0.711022	-1.102722	
H	0.761435	-1.420704	1.047673	
Br	-0.038725	-3.169247	-0.246832	
H	-0.863021	3.343536	-1.789276	
H	-2.180259	5.347865	-1.441894	
H	-4.671201	5.337473	-1.743777	
H	-5.824393	3.219545	-2.369819	
H	-5.747386	0.842864	-2.858019	
H	-5.784810	-1.512872	-3.241950	
H	-4.595550	-3.692089	-3.520887	
H	-2.094526	-3.750843	-3.450588	
O	-0.496221	-1.743468	-3.097447	
H	-0.232379	-2.517330	-2.543702	
H	1.210892	0.888265	3.773338	
H	2.026533	0.285020	6.045860	
H	2.918544	-2.025374	6.469918	
H	2.951945	-3.696130	4.608313	
O	2.231140	-3.325682	2.193452	
H	1.610112	-3.196855	1.433537	
H	0.164044	0.347035	-3.315696	
Compound	$\tau_{\text{OH}^-\text{NO}_3^-}$			
Atom	X	Y	Z	
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C	-4.504565	-1.671004	-3.826350	
C	-3.843866	-0.529912	-3.264603	
C	-2.390072	-0.492762	-3.216697	
C	-1.687230	-1.639780	-3.721088	
C	-2.359830	-2.726361	-4.244786	
C	-4.580737	0.544799	-2.743623	
C	-3.950413	1.656503	-2.161121	
C	-2.498431	1.712954	-2.115286	
C	-1.738765	0.642861	-2.662964	
C	-4.717137	2.733079	-1.606753	
C	-4.099551	3.817953	-1.020510	
C	-2.674841	3.878421	-0.967889	
C	-1.901536	2.863989	-1.498720	
C	-0.224536	0.679864	-2.584293	
N	0.237357	0.148013	-1.285269	
C	0.919670	0.861574	-0.389521	
C	1.302157	0.613853	0.965692	
C	1.978939	1.936399	1.069282	
C	1.594502	2.185617	-0.386780	
N	1.025854	-0.422748	1.774545	
O	2.569620	2.575806	1.947492	
O	1.736617	3.106503	-1.203591	
C	1.596896	-0.651625	3.052073	



Journal Name	ARTICLE		
C	0.797341	-1.227126	4.072709
C	1.375438	-1.485620	5.328956
C	2.714633	-1.165017	5.581170
C	3.503735	-0.587140	4.572377
C	2.944717	-0.345193	3.312563
H	0.231788	0.092296	-3.388513
H	0.167047	1.695282	-2.682661
H	-0.178687	-0.735131	-0.971903
H	0.381380	-1.134599	1.388713
N	-2.047035	-1.646377	0.736331
O	-2.170723	-0.977550	1.813475
O	-3.038334	-1.913350	0.029517
O	-0.873749	-2.038843	0.382255
H	3.548991	0.078349	2.512194
O	-0.516365	-1.564087	3.911594
H	-0.920800	-1.243025	3.060719
H	0.747516	-1.926850	6.103716
H	3.139910	-1.368139	6.564951
H	4.549704	-0.341367	4.757459
H	-0.819807	2.952835	-1.439962
H	-2.189370	4.737666	-0.502594
H	-4.693008	4.629494	-0.597299
H	-5.806014	2.671108	-1.655275
H	-5.671938	0.508710	-2.778137
H	-5.595928	-1.672984	-3.856649
H	-4.298926	-3.611137	-4.725979
H	-1.794306	-3.583499	-4.613199
H	-0.600088	-1.674240	-3.683343



**Figure S1.** Optimized geometries of selected complexes: (**2** and **3**)...Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>) and 4...Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>). Dotted lines were included to highlight the bond lengths of the main hydrogen bonds and anion- $\pi$  interactions organized in the Table 1. Black dots represent the centroid of the aromatic ring in the anthracene and benzene structures. Atoms color code: H = white; C = gray; N = blue; O = red; F = light blue; Cl = green; and Br = light red.



**Figure S2.** Optimized geometries of selected complexes: (5 and 7)...(Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>) and 7...(Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>). Dotted lines were included to highlight the bond lengths of the main hydrogen bonds and anion- $\pi$  interactions organized in the Table 1. Black dots represent the centroid of the aromatic ring in the anthracene and benzene structures. Atoms color code: H = white; C = gray; N = blue; O = red; Cl = green; and Br = light red.

**Table S2.** Selected APT atomic charges (a.u.) in the complexes studied.

Complex	$q_{A-H}^{[a]}$	$q_{B-H}^{[b]}$	$q_{O-H}^{[c]}$	$q_{Total(H)}^{[d]}$	$q_{Anion}^{[e]}$	$q_D^{[f]}$
1...Cl <sup>-</sup>	0.452	0.481	–	0.933	–1.074	2.007
1...Br <sup>-</sup>	0.459	0.491	–	0.951	–1.044	1.995
1...NO <sub>3</sub> <sup>-</sup>	0.406	0.454	–	0.860	–1.119	1.979
2...Cl <sup>-</sup>	0.464	0.474	–	0.938	–1.076	2.014
2...Br <sup>-</sup>	0.475	0.459	–	0.934	–1.048	1.982
2...NO <sub>3</sub> <sup>-</sup>	0.406	0.449	–	0.855	–1.117	1.972
3...Cl <sup>-</sup>	0.446	0.577	–	1.023	–1.077	2.100
3...Br <sup>-</sup>	0.461	0.59	–	1.051	–1.042	2.093
3...NO <sub>3</sub> <sup>-</sup>	0.392	0.535	–	0.927	–1.131	2.058
4...Cl <sup>-</sup>	0.461	0.563	–	1.024	–1.079	2.103
4...Br <sup>-</sup>	0.471	0.565	–	1.036	–1.051	2.087
4...NO <sub>3</sub> <sup>-</sup>	0.381	0.533	–	0.914	–1.123	2.037
5...Cl <sup>-</sup>	0.406	0.424	0.638	1.468	–1.099	2.567
5...Br <sup>-</sup>	0.437	0.446	0.611	1.494	–1.060	2.554
5...NO <sub>3</sub> <sup>-</sup>	0.392	0.502	–	0.894	–1.141	2.035
6...Cl <sup>-</sup>	0.418	0.462	0.609	1.489	–1.085	2.574
6...Br <sup>-</sup>	0.443	0.451	0.626	1.520	–1.028	2.548
6...NO <sub>3</sub> <sup>-</sup>	0.366	0.443	0.632	1.441	–1.055	2.496
7...Cl <sup>-</sup>	0.398	0.422	1.160	1.980	–1.133	3.113
7...Br <sup>-</sup>	0.437	0.421	1.156	2.014	–1.082	3.096
7...NO <sub>3</sub> <sup>-</sup>	0.380	0.463	0.654	1.497	–1.078	2.575

<sup>[a]</sup> APT charge related to hydrogen atom in the –NH group closer to the anthracene ring; <sup>[b]</sup> APT charge of the hydrogen atom in the –NH group closer to the benzene ring; <sup>[c]</sup> APT charge of the hydrogen atoms in the –OH groups closer to anion; <sup>[d]</sup>  $q_{Total(H)} = q_{A-H} + q_{B-H} + q_{O-H}$ ; <sup>[e]</sup> APT charge of Cl<sup>-</sup>, Br<sup>-</sup>, and the oxygen atom of the NO<sub>3</sub><sup>-</sup> anion in the closest position to the –NH groups; <sup>[f]</sup>  $q_D = q_{A-H} + q_{B-H} + q_{O-H} - q_{Anion}$ .

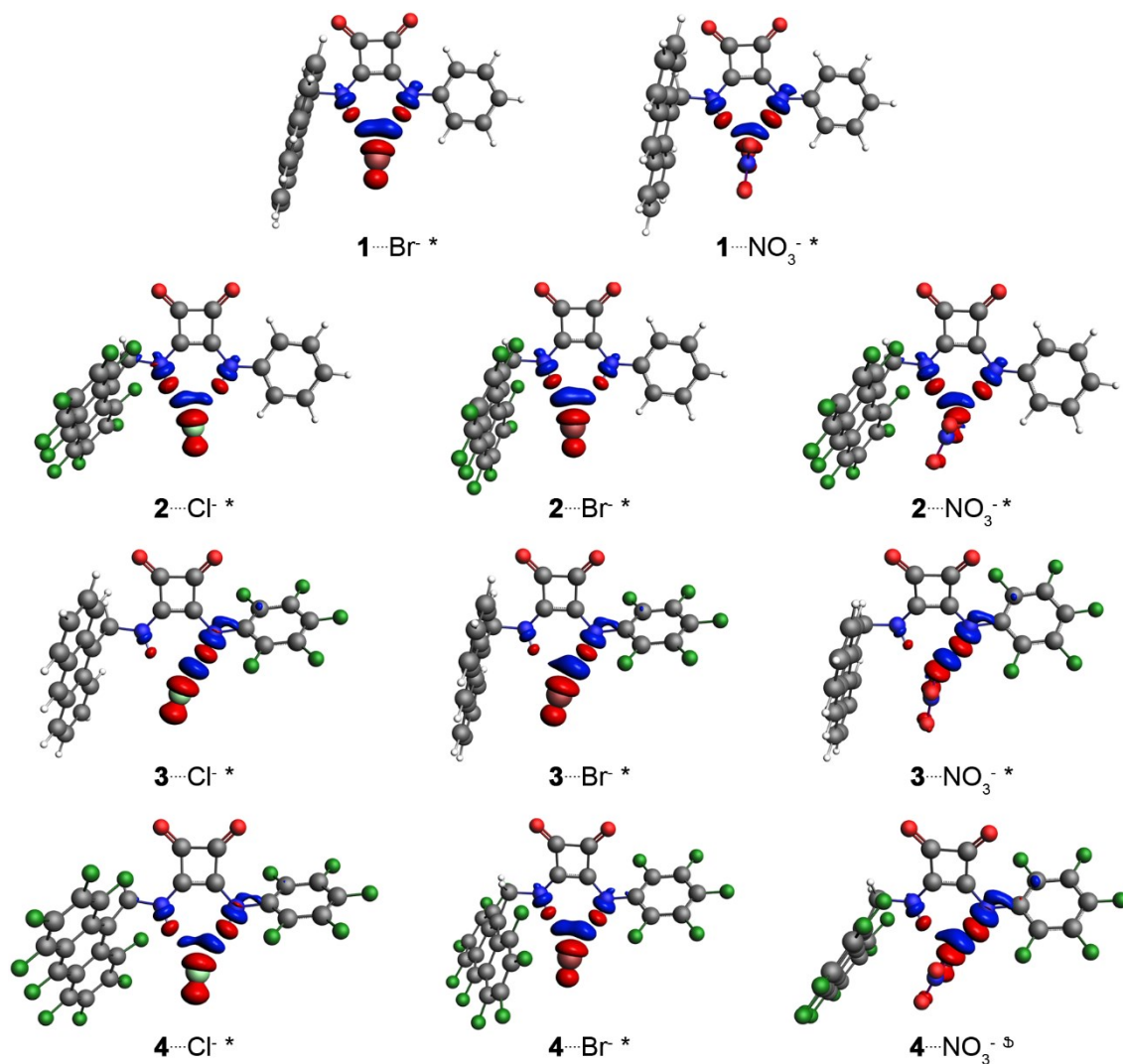
To evaluate the importance of the electrostatic interactions between the hydrogen atom of the groups –NH and –OH, in the receptors **1–7**, and the anions Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>, the APT atomic charges of: i) the hydrogen atom of the –NH group closer to anthracene ring,  $q_{A-H}$ ; ii) the hydrogen atom of the –NH group closer to benzene ring,  $q_{B-H}$ ; iii) the hydrogen atom of the –OH group closer to anion; and iv) Cl<sup>-</sup>, Br<sup>-</sup>, and of the oxygen atom of the NO<sub>3</sub><sup>-</sup> anion in the closest position to –NH/–OH groups,  $q_{Anion}$ , are organized in the Table S2. The values of:  $q_D = q_{A-H} + q_{B-H} + q_{O-H} - q_{Anion}$  (Table S2), will be used as base to establish the strength of these local electrostatic interactions and will be compared with the values obtained to  $\Delta V_{elstat}$  energy in the bonds (**1–7**)... (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>).

The H → F substitutions in the anthracene ring (**1** → **2**) increase the value of  $q_D$  from **1**...Cl<sup>-</sup> to **2**...Cl<sup>-</sup>. However, the opposite trend is visualized from **1**...Br<sup>-</sup> and **1**...NO<sub>3</sub><sup>-</sup> to **2**...Br<sup>-</sup> and **2**...NO<sub>3</sub><sup>-</sup>, respectively. It occurs because in **1**...Cl<sup>-</sup> → **2**...Cl<sup>-</sup> there is an increase in the value of  $q_{A-H}$ , which counterbalance the decrease in the value of  $q_{B-H}$ . However, in **1**...Br<sup>-</sup> → **2**...Br<sup>-</sup> and **1**...NO<sub>3</sub><sup>-</sup> → **2**...NO<sub>3</sub><sup>-</sup> there is not an relevant increase of  $q_{A-H}$ , which counterbalance the decrease in the value of  $q_{B-H}$ . These data show that the H → F substitutions favor only the electrostatic interaction anthracene–NH...Cl<sup>-</sup>, in agreement with the more favorable  $\Delta V_{elstat}$  energy in **2**...Cl<sup>-</sup> compared to **1**...Cl<sup>-</sup>. For Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup> recognition, the H → F substitutions favor the anion– $\pi$  interactions, which promote more favorable values of the  $\Delta V_{elstat}$  component in **2**...Br<sup>-</sup> and **2**...NO<sub>3</sub><sup>-</sup> regarding to **1**...Br<sup>-</sup> and **1**...NO<sub>3</sub><sup>-</sup>, respectively. The H → F substitutions in the benzene ring (**1** → **3**) promote a relevant increase in the values of  $q_{B-H}$  and are responsible by larger values of  $q_D$  and more stabilizing values of the  $\Delta V_{elstat}$  term in the structures **3**... (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>) regarding to **1**... (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>). This same trend is observed when the H → F substitutions occur in the both rings: anthracene and benzene (**1** → **4**).

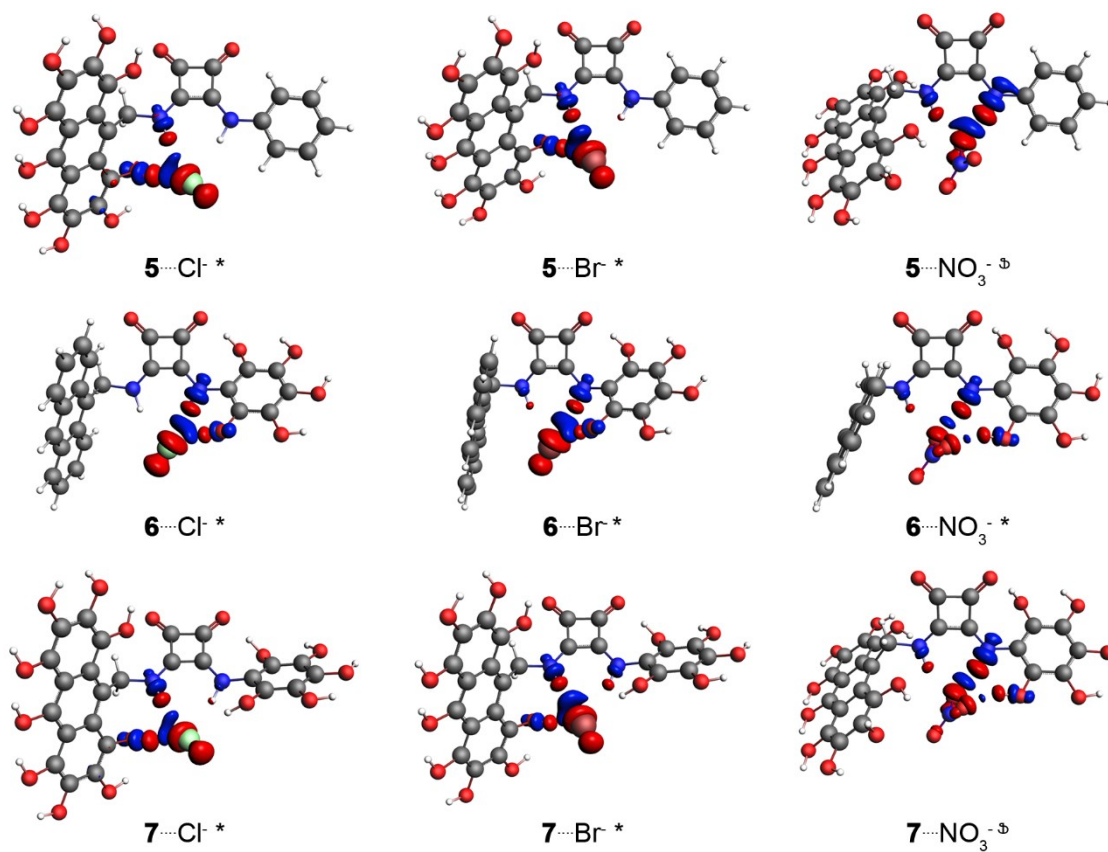
The –OH substituted structures (**5–7**)... (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>) have larger values of  $q_D$  and more favorable values of the  $\Delta V_{elstat}$  term compared to non-substituted complexes **1**... (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>). The presence of –OH groups did not polarize the interactions –NH... (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>), as can be observed by lower values of  $q_{A-H}$  and  $q_{B-H}$  in the complexes (**5–7**)... (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>) regarding

to  $\mathbf{1}\cdots(\text{Cl}^-, \text{Br}^- \text{ and } \text{NO}_3^-)$ . Exceptionally, the presence of  $-\text{OH}$  groups in the anthracene ring of the complex  $\mathbf{5}\cdots\text{NO}_3^-$  polarizes the interaction  $\text{benzene}-\text{O}-\text{H}\cdots\text{NO}_3^-$ . However, in general, the  $-\text{OH}$  groups provide the hydrogen atoms, which can establish electrostatic interactions with the anions  $\text{Cl}^-$ ,  $\text{Br}^-$  and  $\text{NO}_3^-$ . It explains the larger values of  $q_D$  in the structures  $(\mathbf{5}-\mathbf{7})\cdots(\text{Cl}^-, \text{Br}^- \text{ and } \text{NO}_3^-)$  than in the complexes  $\mathbf{1}\cdots(\text{Cl}^-, \text{Br}^- \text{ and } \text{NO}_3^-)$ . On the whole, the  $\text{H} \rightarrow \text{OH}$  substitutions promote larger values of  $q_D$  and more attractive  $\Delta V_{\text{elstat}}$  energy than  $\text{H} \rightarrow \text{F}$  substitutions from the comparison of the structures  $(\mathbf{5}-\mathbf{7})\cdots(\text{Cl}^-, \text{Br}^- \text{ and } \text{NO}_3^-)$  concerning to  $(\mathbf{2}-\mathbf{4})\cdots(\text{Cl}^-, \text{Br}^- \text{ and } \text{NO}_3^-)$ . As exception, the interaction  $\mathbf{5}\cdots\text{NO}_3^-$  appears with a less attractive value of the  $\Delta V_{\text{elstat}}$  component than the bond  $\mathbf{2}\cdots\text{NO}_3^-$  due to the anion- $\pi$  interaction between anthracene ring present in the receptor  $\mathbf{2}$  and the anion  $\text{NO}_3^-$  and the absence of an  $-\text{OH}$  group in the receptor  $\mathbf{5}$  with suitable orientation to interact with the anion  $\text{NO}_3^-$ , as highlighted from the discussion realized using the MEP surfaces.

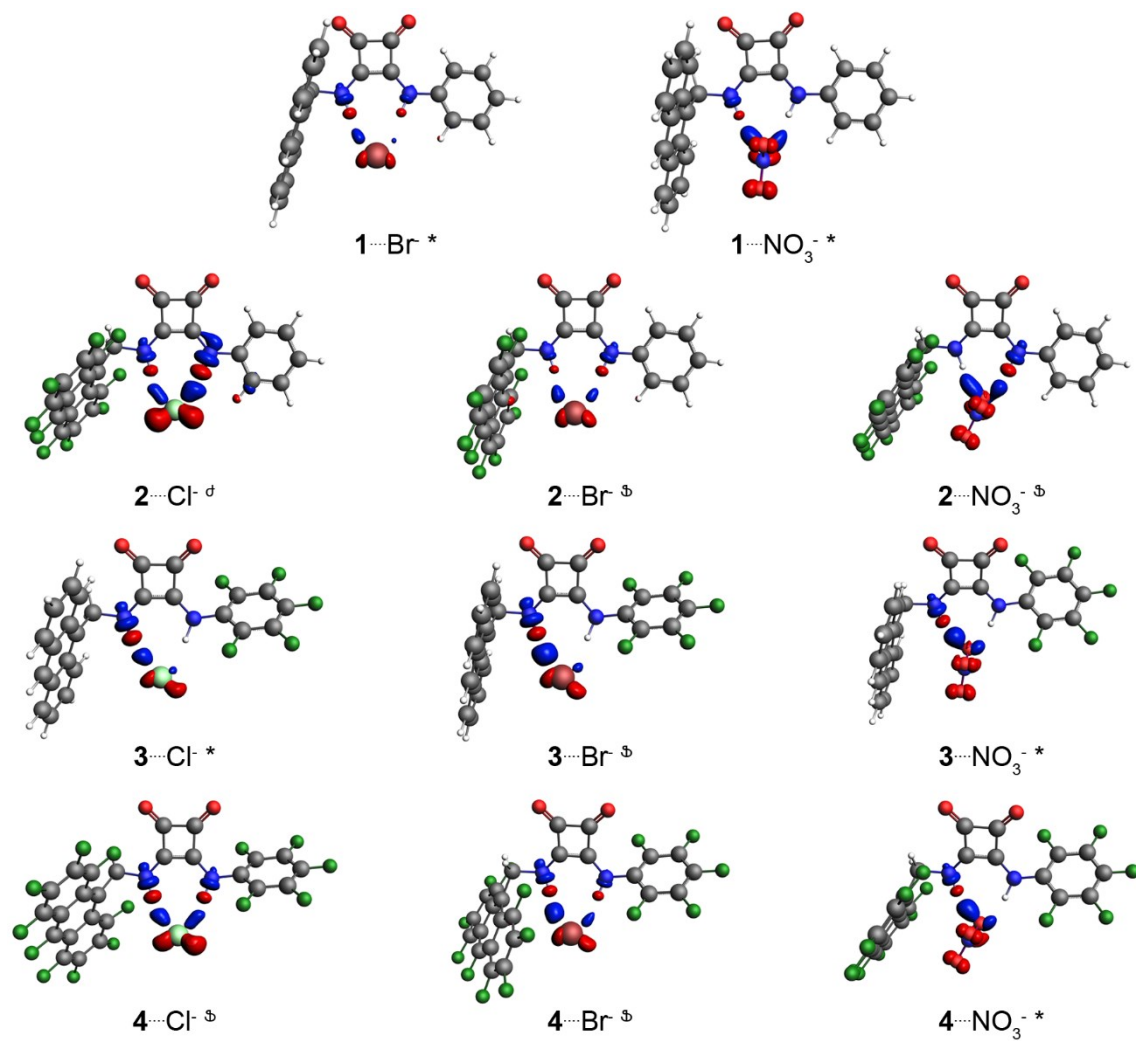
The values of  $q_D$  in the interactions  $(\mathbf{1}-\mathbf{7})\cdots\text{Cl}^-$  are larger than in the bonds  $(\mathbf{1}-\mathbf{7})\cdots\text{Br}^-$ . It indicates that the local electrostatic interactions  $-\text{NH}\cdots\text{Cl}^-$  are more favorable than the bonds  $-\text{NH}\cdots\text{Br}^-$ . Overall, it agrees with the more attractive values of the  $\Delta V_{\text{elstat}}$  component in the structures  $(\mathbf{1}-\mathbf{7})\cdots\text{Cl}^-$  regarding to complexes  $(\mathbf{1}-\mathbf{7})\cdots\text{Br}^-$ . The exceptions are the molecules  $\mathbf{2}\cdots\text{Cl}^-$  and  $\mathbf{4}\cdots\text{Cl}^-$  with less favorable values of the  $\Delta V_{\text{elstat}}$  term in relation to complexes  $\mathbf{2}\cdots\text{Br}^-$  and  $\mathbf{4}\cdots\text{Br}^-$ , respectively. This trend, as mentioned in the analysis of the MEP surfaces, is, probably, due to the bromide anion preferentially interacting with the  $\pi$ -acid region presents in the receptors  $\mathbf{2}$  and  $\mathbf{4}$ , regarding to chloride anion. The bonds  $(\mathbf{1}-\mathbf{7})\cdots\text{Cl}^-$  show larger values of  $q_D$  and more attractive values of the  $\Delta V_{\text{elstat}}$  energy compared to interactions  $(\mathbf{1}-\mathbf{7})\cdots\text{NO}_3^-$ . Here, the more favorable electrostatic interactions  $-\text{NH}\cdots\text{Cl}^-$  than the bonds  $-\text{NH}\cdots\text{NO}_3^-$  appear as decisive to establish the more attractive electrostatic interactions in the structures  $(\mathbf{1}-\mathbf{7})\cdots\text{Cl}^-$  concerning to compounds  $(\mathbf{1}-\mathbf{7})\cdots\text{NO}_3^-$ . The interactions  $(\mathbf{1}-\mathbf{7})\cdots\text{Br}^-$  show in relation to bonds  $(\mathbf{1}-\mathbf{7})\cdots\text{NO}_3^-$  the same tendency in relation to the comparison between the complexes  $(\mathbf{1}-\mathbf{7})\cdots\text{Cl}^-$  and  $(\mathbf{1}-\mathbf{7})\cdots\text{NO}_3^-$ , using the parameters  $q_D$  and  $\Delta V_{\text{elstat}}$ .



**Figure S3.** The first density deformation channel surface plots,  $\Delta\rho_1$ , related to interactions between the receptors (1–4) and anions ( $\text{Cl}^-$ ,  $\text{Br}^-$  and  $\text{NO}_3^-$ ). Red and blue regions indicate the electronic density outflow and inflow, respectively. The isovalue used to represent these surfaces is: <sup>\*</sup> = 0.002; and <sup>b</sup> = 0.015 a.u. Atoms color code: H = white; C = gray; N = blue; O = red; F = green; Cl = light green; and Br = brown.

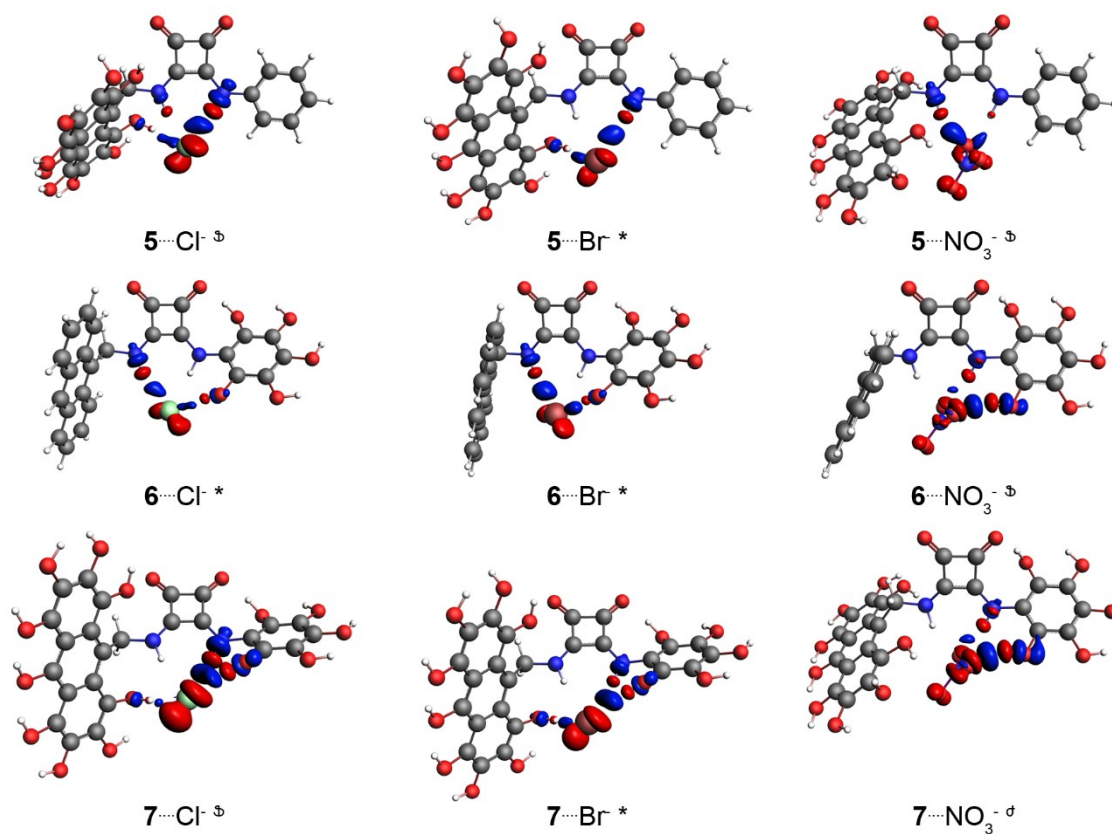


**Figure S4.** The first density deformation channel surface plots,  $\Delta\rho_1$ , related to interactions between the receptors (5–7) and anions ( $\text{Cl}^-$ ,  $\text{Br}^-$  and  $\text{NO}_3^-$ ). Red and blue regions indicate the electronic density outflow and inflow, respectively. The isovalue used to represent these surfaces is: \* = 0.002; and <sup>b</sup> = 0.015 a.u. Atoms color code: H = white; C = gray; N = blue; O = red; Cl = light green; and Br = brown.

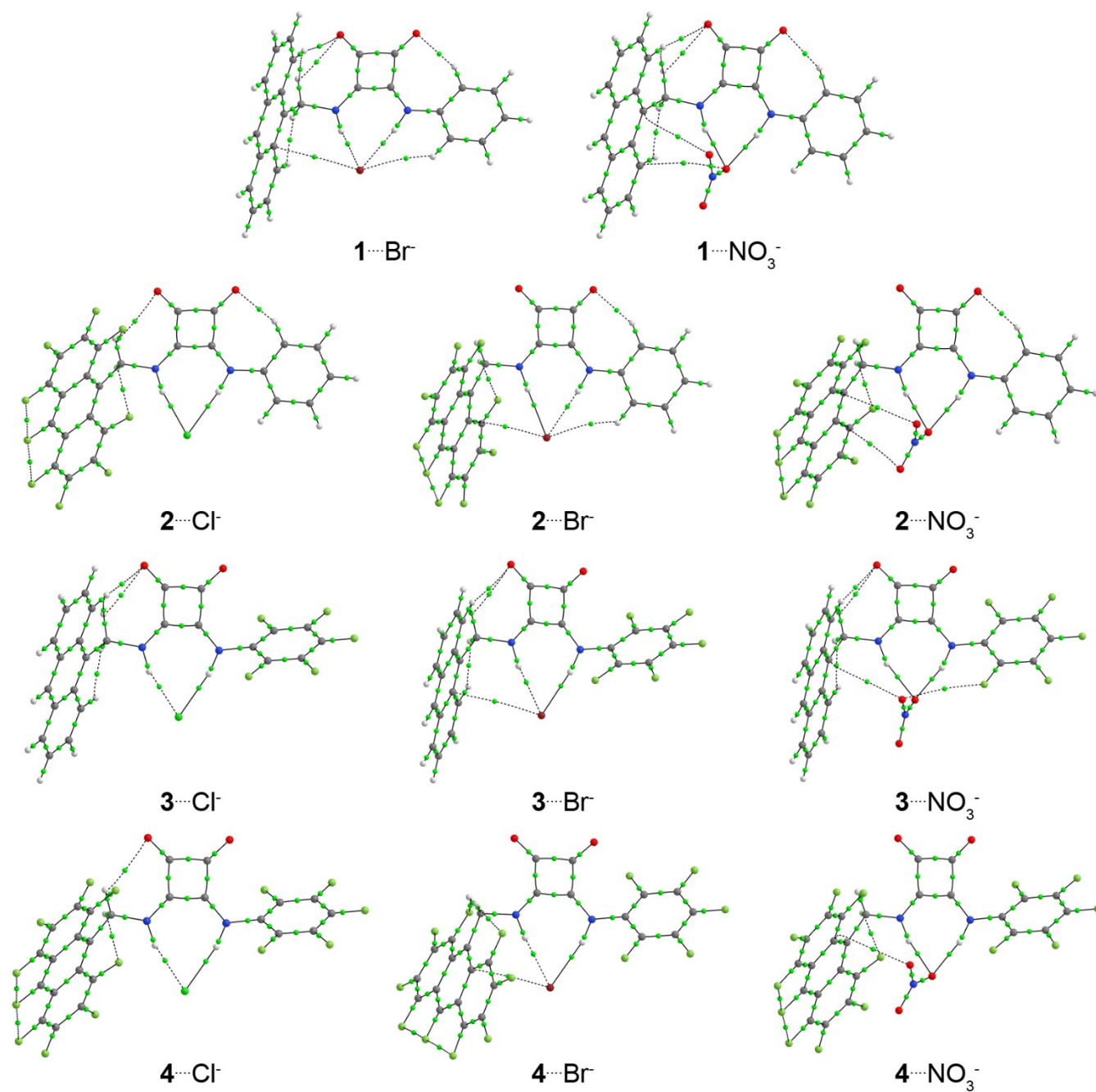


**Figure S5.** The second density deformation channel surface plots,  $\Delta\rho_2$ , related to interactions between the receptors (1–4) and anions ( $\text{Cl}^-$ ,  $\text{Br}^-$  and  $\text{NO}_3^-$ ). Red and blue regions indicate the electronic density outflow and inflow, respectively. The isovalue used to represent these surfaces is: \* = 0.002; <sup>d</sup> = 0.015; and <sup>d</sup> = 0.010 a.u. Atoms color code: H = white; C = gray; N = blue; O = red; F = green; Cl = light green; and Br = brown.

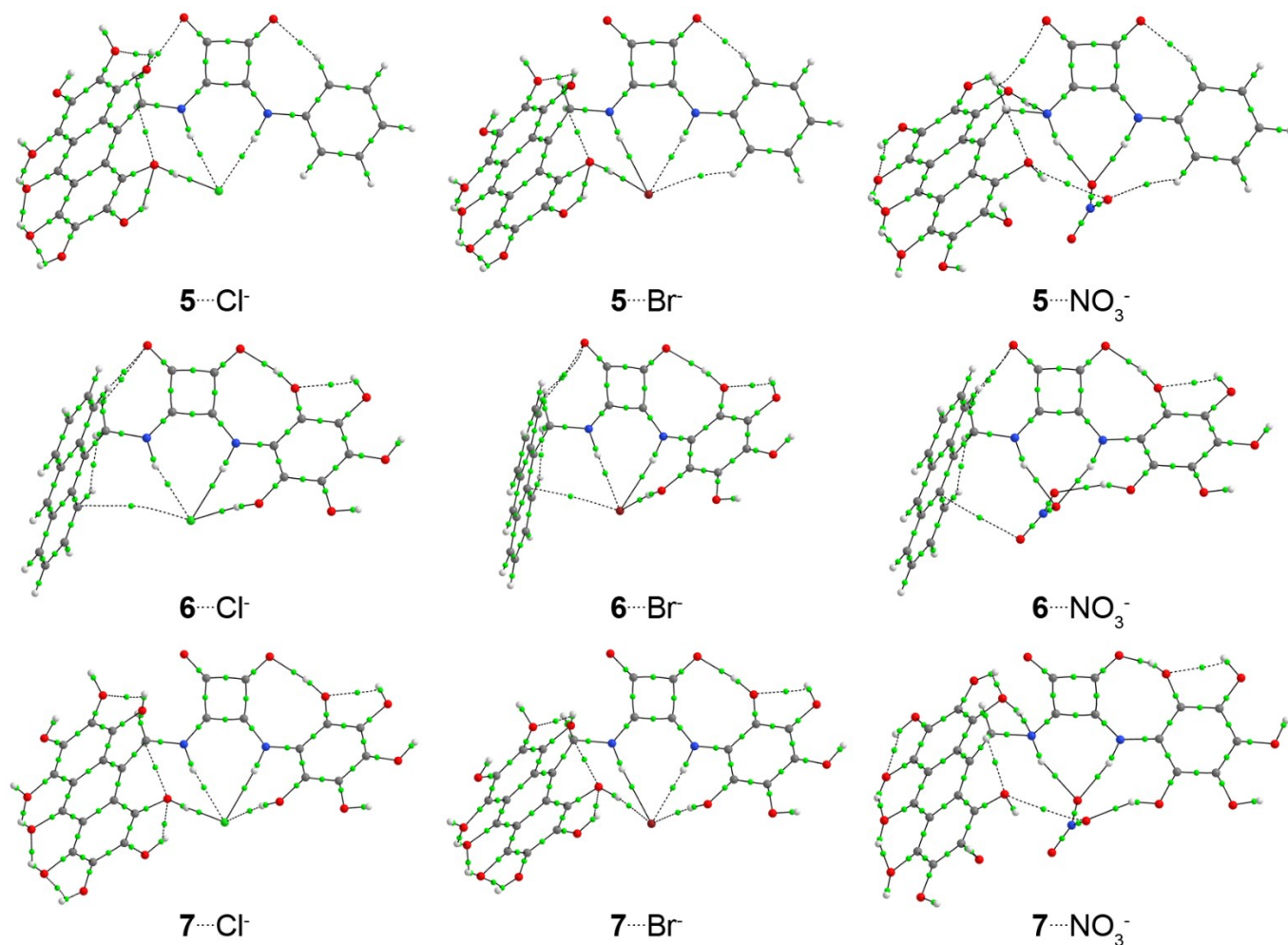




**Figure S6.** The second density deformation channel surface plots,  $\Delta\rho_2$ , related to interactions between the receptors (5–7) and anions (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>). Red and blue regions indicate the electronic density outflow and inflow, respectively. The isovalue used to represent these surfaces is: \* = 0.002; <sup>Ⓛ</sup> = 0.015; and <sup>Ⓢ</sup> = 0.010 a.u. Atoms color code: H = white; C = gray; N = blue; O = red; Cl = light green; and Br = brown.



**Figure S7.** Topological map containing the bond paths (continuous or dashed lines connecting the cores) and bond critical points (small light green points) related to interactions between the receptors (**1–4**) and anions (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>). Atoms color code: H = white; C = gray; N = blue; O = red; F = green; Cl = light green; and Br = brown.



**Figure S8.** Topological map containing the bond paths (continuous or dashed lines connecting the cores) and bond critical points (small light green points) related to interactions between the receptors (5-7) and anions (Cl<sup>-</sup>, Br<sup>-</sup> and NO<sub>3</sub><sup>-</sup>). Atoms color code: H = white; C = gray; N = blue; O = red; Cl = light green; and Br = brown.

**Table S3.** Ratio between the kinetic energy density,  $G_b$ , and potential energy density,  $V_b$ ,  $-G_b/V_b$ , and electron density,  $\rho_b$ , at BCPs related to interactions between the receptors (1–4) and anions ( $\text{Cl}^-$ ,  $\text{Br}^-$  and  $\text{NO}_3^-$ ). The values of all the parameters are in a.u.

Complex	BCP	$-G_b/V_b$	$\rho_b$
1...Cl <sup>-</sup>	C...Cl <sup>-</sup>	1.304	0.002
	N(1)–H(1)...Cl <sup>-[a]</sup>	0.965	0.024
	N(2)–H(2)...Cl <sup>-[b]</sup>	0.941	0.027
1...Br <sup>-</sup>	C...Br <sup>-</sup>	1.229	0.005
	N(1)–H(1)...Br <sup>-[a]</sup>	0.978	0.024
	N(2)–H(2)...Br <sup>-[b]</sup>	0.960	0.025
	C–H...Br <sup>-</sup>	1.323	0.006
1...NO <sub>3</sub> <sup>-</sup>	C...O <sup>-</sup>	1.389	0.002
	N(1)–H(1)...O <sup>-[a]</sup>	1.392	0.003
	N(2)–H(2)...O <sup>-[b]</sup>	0.957	0.029
2...Cl <sup>-</sup>	N(1)–H(1)...Cl <sup>-[a]</sup>	0.947	0.026
	N(2)–H(2)...Cl <sup>-[b]</sup>	0.956	0.025
	C...Br <sup>-</sup>	1.238	0.007
2...Br <sup>-</sup>	N(1)–H(1)...Br <sup>-[a]</sup>	0.941	0.027
	N(2)–H(2)...Br <sup>-[b]</sup>	0.999	0.021
	C–H...Br <sup>-</sup>	1.336	0.006
	C...O <sup>-</sup>	1.425	0.002
2...NO <sub>3</sub> <sup>-</sup>	N(1)–H(1)...O <sup>-[a]</sup>	1.425	0.002
	N(2)–H(2)...O <sup>-[b]</sup>	0.960	0.033
	N(2)–H(2)...O <sup>-[b]</sup>	0.945	0.030
3...Cl <sup>-</sup>	N(1)–H(1)...Cl <sup>-[a]</sup>	0.986	0.023
	N(2)–H(2)...Cl <sup>-[b]</sup>	0.912	0.031
3...Br <sup>-</sup>	C...Br <sup>-</sup>	1.228	0.005
	N(1)–H(1)...Br <sup>-[a]</sup>	0.988	0.023
	N(2)–H(2)...Br <sup>-[b]</sup>	0.923	0.029
3...NO <sub>3</sub> <sup>-</sup>	C...O <sup>-</sup>	1.364	0.003
	N(1)–H(1)...O <sup>-[a]</sup>	0.960	0.027
	N(2)–H(2)...O <sup>-[b]</sup>	0.957	0.036
	C–F...O <sup>-</sup>	1.681	0.002
4...Cl <sup>-</sup>	N(1)–H(1)...Cl <sup>-[a]</sup>	0.963	0.025
	N(2)–H(2)...Cl <sup>-[b]</sup>	0.924	0.029
4...Br <sup>-</sup>	C...Br <sup>-</sup>	1.243	0.007
	N(1)–H(1)...Br <sup>-[a]</sup>	0.965	0.025
	N(2)–H(2)...Br <sup>-[b]</sup>	0.954	0.025
4...NO <sub>3</sub> <sup>-</sup>	C...O <sup>-</sup>	1.334	0.003
	N(1)–H(1)...O <sup>-[a]</sup>	0.964	0.028
	N(2)–H(2)...O <sup>-[b]</sup>	0.955	0.034

<sup>[a]</sup> BCP related to –NH group closer to anthracene ring; <sup>[b]</sup> BCP related to –NH group closer to benzene ring.

**Table S4.** Ratio between the kinetic energy density,  $G_b$ , and potential energy density,  $V_b$ ,  $-G_b/V_b$ , and electron density,  $\rho_b$ , at BCPs related to interactions between the receptors (5–7) and anions ( $\text{Cl}^-$ ,  $\text{Br}^-$  and  $\text{NO}_3^-$ ). The values of all the parameters are in a.u.

Complex	BCP	$-G_b/V_b$	$\rho_b$
5 $\cdots\text{Cl}^-$	O–H $\cdots\text{Cl}^-$	0.899	0.032
	N(1)–H(1) $\cdots\text{Cl}^-$ <sup>[a]</sup>	0.979	0.023
	N(2)–H(2) $\cdots\text{Cl}^-$ <sup>[b]</sup>	1.011	0.021
5 $\cdots\text{Br}^-$	O–H $\cdots\text{Br}^-$	0.928	0.028
	N(1)–H(1) $\cdots\text{Br}^-$ <sup>[a]</sup>	0.960	0.026
	N(2)–H(2) $\cdots\text{Br}^-$ <sup>[b]</sup>	1.008	0.021
	C–H $\cdots\text{Br}^-$	1.354	0.005
5 $\cdots\text{NO}_3^-$	C–HO $\cdots\text{O}^-$	1.154	0.008
	N(1)–H(1) $\cdots\text{O}^-$ <sup>[a]</sup>	0.976	0.026
	N(2)–H(2) $\cdots\text{O}^-$ <sup>[b]</sup>	0.950	0.035
	C–H $\cdots\text{O}^-$	1.458	0.003
6 $\cdots\text{Cl}^-$	C $\cdots\text{Cl}^-$	1.321	0.002
	N(1)–H(1) $\cdots\text{Cl}^-$ <sup>[a]</sup>	1.018	0.020
	N(2)–H(2) $\cdots\text{Cl}^-$ <sup>[b]</sup>	0.920	0.030
	O–H $\cdots\text{Cl}^-$	0.933	0.027
6 $\cdots\text{Br}^-$	C $\cdots\text{Br}^-$	1.249	0.006
	N(1)–H(1) $\cdots\text{Br}^-$ <sup>[a]</sup>	0.999	0.022
	N(2)–H(2) $\cdots\text{Br}^-$ <sup>[b]</sup>	0.949	0.026
	O–H $\cdots\text{Br}^-$	0.933	0.027
6 $\cdots\text{NO}_3^-$	C $\cdots\text{O}^-$	1.341	0.003
	N(1)–H(1) $\cdots\text{O}^-$ <sup>[a]</sup>	0.975	0.026
	N(2)–H(2) $\cdots\text{O}^-$ <sup>[b]</sup>	0.947	0.032
	O–H $\cdots\text{O}^-$	0.965	0.038
7 $\cdots\text{Cl}^-$	O–H $\cdots\text{Cl}^-$	0.994	0.022
	N(1)–H(1) $\cdots\text{Cl}^-$ <sup>[a]</sup>	0.946	0.026
	N(2)–H(2) $\cdots\text{Cl}^-$ <sup>[b]</sup>	0.995	0.022
	N(2)–H(2) $\cdots\text{Cl}^-$ <sup>[b]</sup>	0.961	0.025
7 $\cdots\text{Br}^-$	O–H $\cdots\text{Br}^-$	1.010	0.020
	N(1)–H(1) $\cdots\text{Br}^-$ <sup>[a]</sup>	0.966	0.025
	N(2)–H(2) $\cdots\text{Br}^-$ <sup>[b]</sup>	0.094	0.032
	N(2)–H(2) $\cdots\text{Br}^-$ <sup>[b]</sup>	0.095	0.032
7 $\cdots\text{NO}_3^-$	C–HO $\cdots\text{O}^-$	1.138	0.007
	N(1)–H(1) $\cdots\text{O}^-$ <sup>[a]</sup>	0.976	0.025
	N(2)–H(2) $\cdots\text{O}^-$ <sup>[b]</sup>	0.950	0.033
	O–H $\cdots\text{O}^-$	0.968	0.038

<sup>[a]</sup> BCP related to –NH group closer to anthracene ring; <sup>[b]</sup> BCP related to –NH group closer to benzene ring.